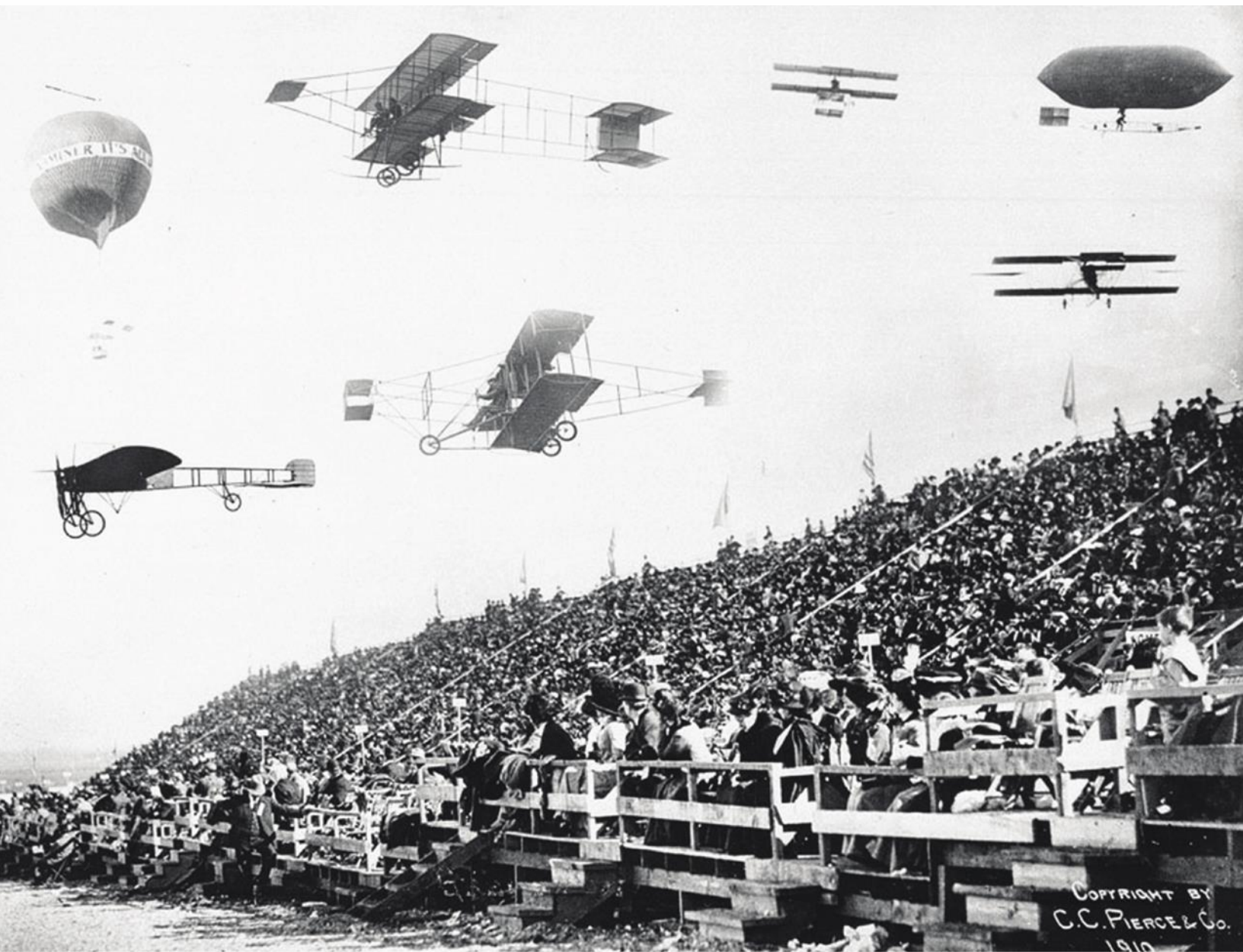


Long Beach Airport and Southern California: A Brief New Aviation and Aeronautics History (1900s - 1980s)



November 2023

Prepared for:

Long Beach Airport

4100 E. Donald Douglas Dr., Second Floor

Long Beach, CA 90808

www.lgb.org

Prepared by:

Historical Society of Long Beach

4260 Atlantic Avenue

Long Beach, CA 90807

www.hslb.org

Authors: Alison Rose Jefferson

Philip S. Hart

Cover page image:

Fig. 1. A composite photograph of early model biplanes, a monoplane, a gas-filled balloon, and a dirigible (also gas-filled) hovering above or flying by bleachers filled with spectators at the 1910 Los Angeles Air Meet at Dominguez Hill, January 1910. "All in the Examiner" is an advertisement that is painted on the balloon (at left). Flags are placed at intervals at the top of the bleachers. Caption reads: "Great Aviation Meet, L.A."

Image:

https://digitallibrary.usc.edu/CS.aspx?VP3=DamView&VBID=2A3BXZ8X23D6Q&SMLS=1&RW=1827&RH=1224&FR_=1&W=2217&H=1171, California Historical Society Collection, 1860-1960, University of Southern California Libraries

Table of Contents

Forward	1
About the Authors	2
It's a Great Day for Flying	5
Origins of Flying in Long Beach and Around Southern California and World War I (1914–1918)	7
The Golden Age of Aviation (1918–1938)	40
World War II Launches Decades of Growth in Aviation and Aeronautics Industries and the Entry of More Diverse Participants	112
From Flying Airplanes to Flying Into Space and Other Aeronautic Technological Innovations (1950s and Beyond)	173
Growing Pains: Long Beach, Suburbs and the Aeronautics Industries	196
Timeline	208
Bibliography	216

Forward

By Cynthia Guidry, Airport Director, Long Beach Airport

With a storied aviation history that goes beyond its 100 years, Long Beach Airport (LGB) is looking back at the past as it celebrates its future and officially marks its centennial on November 26, 2023.

This report was commissioned with the goal to highlight the airport's most significant historical milestones and reveal some of the important untold stories of the oldest municipal airport in California. We wanted this to serve as both a general overview of our history and a look at the forgotten or overlooked stories that weren't being told, particularly those about women and Black, Latinx, Asian, Indigenous, and other persons of color who contributed greatly to the field of aviation in Southern California.

In this report, you'll read about pioneering Long Beach aviators such as Earl Daugherty and Frank Champion, the first licensed pilots in the city, and Barbara Erickson London, the only woman during World War II to earn an Air Medal. You'll also hear stories about Long Beach's unique ties to world-renowned aviators Charles Lindberg, Cal Rodgers, and Howard Hughes, right alongside stories about famed women aviators such as Amelia Earhart, Bessie Coleman, and Pancho Barnes.

We hope you'll be inspired by that history as much as lesser-known tales, such as that of Tiny Broadwick, who was the first woman to use a parachute in 1913 and performed many stunts in Long Beach, or Gladys O'Donnell, nicknamed the "The Flying Housewife" as she competed in women's air races (sometimes called Powder Puff Derbies) from Long Beach and across the country. Perhaps you haven't heard of Monty Montijo, an accomplished Mexican American aviator and businessman who was active in Long Beach in the 1920s and 1930s, or Henry Ohye, a second-generation Japanese American commercial pilot who, starting in 1965, organized a long-running annual air race from Long Beach, among many other accomplishments. You also might not know that several Tuskegee Airmen called Long Beach home, including Perry Lindsey, who went on to become the city's first Black school principal.

Long Beach Airport is grateful for the hard work, expertise, and dedication of this report's co-authors, Dr. Alison Rose Jefferson and Dr. Philip S. Hart, for uncovering new and uplifting stories from our airport's rich history.

Thank you for your interest in Long Beach Airport's history!

About the Authors

Alison Rose Jefferson

Historian, Project Leader and Co-Author

Dr. Alison Rose Jefferson is a publicly engaged independent historian, heritage conservation consultant, and a third-generation Californian. She has worked extensively across Los Angeles and the Southern California region to elucidate and re-center the African American experience in local history, heritage conservation efforts, civic memory, and the American identity.

Her recent book, *Living the California Dream: African American Leisure Sites during the Jim Crow Era* was awarded the 2020 Miriam Matthews Ethnic History Award by the Los Angeles City Historical Society for its exceptional contributions to the greater understanding and awareness of regional history. The book explores the significance places within the African American experience in geography, California Dream mythology, Southern California outdoor culture, American history and identity, and contemporary heritage conservation efforts.

Along with working on the Long Beach Airport Centennial and other projects, Dr. Jefferson is currently a guest curator for the “Black California Dreamin’: Claiming Space in America’s Leisure Frontier” exhibition (August 5, 2023 to March 31, 2024) at the California African American Museum in Los Angeles.

Recently, she has completed a few applied/public History projects: Santa Monica’s Belmar History + Art and the Angels Walk LA Central Avenue Heritage Trail. In 2021, Dr. Jefferson was honored with the Santa Monica Conservancy’s Cultural Resource Award for the Belmar History + Art project’s commemoration of the early African American neighborhoods of Santa Monica and the contribution of their residents to the city. Dr. Jefferson and Michael Blum of Sea of Clouds were honored with the 2020 Cultural Landscape Award from the Santa Monica Conservancy for the accomplishment of getting the Bay Street Beach Historic District listed on the National Register of Historic Places.

Dr. Jefferson earned her Bachelor of Arts from Pomona College, a Master of Heritage Conservation degree from the University of Southern California and a Doctor of Philosophy in History from the University of California, Santa Barbara. Her work has garnered attention in varied global media outlets. For more on Dr. Jefferson’s work, see her website, alisonrosejefferson.com.

Philip S. Hart

Co-Author

As a leading authority on early African American aviators, Dr. Philip S. Hart has produced books for young readers, films, podcasts, photo essays and museum exhibitions on this topic. He and his wife Tanya Hart are creators and producers of the scripted eight episode podcast series “Invisible Eagles: Bessie Coleman” starring Oscar nominee Quvenzhane Wallis that began streaming in late October 2023.

The Harts’ PBS documentary film “Flyers in Search of a Dream” (1987) tells the story of early African American aviators and has been a top selling title in the PBS Home Video catalogue since 1988. With the help of Reeve Lindbergh and Lerner Publishing Company, Dr. Hart has published three books for young readers on early African American aviators. *Flying Free: America’s First Black Aviators* was a 1992 Notable Children’s Trade Book in Social Studies. *Up in the Air: The Story of Bessie Coleman* (1996) and *Bessie Coleman: Just the Facts* (2005) are source material for Dr. Hart’s Bessie Coleman podcast series. In 2013 Oxford University Press/African American Studies Center published his photo essay “Early African American Aviators” (2013/reprinted 2023).

Dr. Hart was professor of sociology and director of the William Monroe Trotter Institute for the Study of Black Culture at the University of Massachusetts Boston for nearly thirty years. In 2018 he was the Rachel B. Noel Distinguished Visiting Professor at Metropolitan State University Denver. From 2006 to 2008 Dr. Hart was Executive Director of Urban Land Institute Los Angeles. He is an honors graduate from the University of Colorado, Boulder where he was on the basketball team. He earned Master of Arts and Doctor of Philosophy degrees in Sociology at Michigan State University. Dr. Hart is a “Mile High City” native where he attended Denver East High School. He resides in Los Angeles with his wife and family.



Fig. 2. Earl Daugherty flies his airplane over the Pacific Ocean shoreline of Long Beach, CA, 1910s. He established an early Long Beach flight school and inland airfield in 1919. Daugherty was instrumental in advocating for the City of Long Beach to develop a municipally owned airport for the public's full benefit which came to fruition in 1923.

Long Beach Airport Archives

It's a Great Day for Flying

The Long Beach Airport centennial, November 26, 1923, marks not only the establishment of the first municipally-owned airfield in Southern California, but also the time when aviation was beginning to capture the imagination of Americans and everyone around the world. Further this Long Beach milestone commemorates the enduring legacy of California's aeronautics and aerospace industry innovations and technological development from the early twentieth to the twenty-first centuries. The airport was originally called Daugherty Field-Long Beach Municipal Airport to honor Earl S. Daugherty who is considered the "Father of Long Beach Aviation." In 1911 he became one of the earliest locally licensed aviators. He was a legendary, pioneering visionary and entrepreneur in commercial aviation and instrumental in developing Long Beach's airport in what is known globally as the Golden Age of Aviation (1918–1938). Southern California has now for over a century been at the center of air and space flight experimentation and manufacturing, reshaping and challenging the region's economy, culture, demographics, environment, political landscape, and the human imagination.¹

This essay is a brief overview of the histories and significance of Long Beach and Southern California aviation and aerospace activities from the 1900s to 1980s. An important component of this essay is the inclusion of a broader representation of who has been participating in making these histories. Included are hidden, overlooked and forgotten stories about women and Black, Latinx, Asian, Indigenous, and other persons of color who contributed

¹ *Wings Over Long Beach Aviation Expo* event (Nov. 2–3, 1996) publication, Prepared by the *Long Beach Business Journal*, November 1996; Peter J. Westwick, ed., *Blue Sky Metropolis: The Aerospace Century in Southern California* (Berkeley and San Marino, CA: Huntington-USC Institute on California and the West by University of California Press and The Huntington Library, 2012), 1; William Deverell, "Forward" in *Blue Sky Metropolis*, 2012, vii.

to making Long Beach and the Southern California environs an aviation and aerospace industries center. This essay represents only a fraction of the work remaining to be done in exploring the field of new aviation and aerospace histories and the social histories related to them, in Long Beach, California, the nation, and even globally. We hope this essay will stimulate further research into these histories. We hope readers will be inspired by these histories illuminated in this essay to pursue their dreams for the life and the careers they want. For some this may be the pursuit of aviation and aerospace life experiences. Otherwise we hope readers will be invited to look further into more inclusive social histories of California and beyond.

Origins of Flying in Long Beach and Around Southern California and World War I (1914–1918)

Boosters from Long Beach, Los Angeles and other cities in Southern California invested in placemaking. The possibilities of the place and modernity became another way to encourage migration to the Golden State. At the turn of the twentieth century before airplanes flew over the City of Long Beach and the California landscape hot air balloons passed through the sky when these contraptions were popular worldwide. In 1905 one was used in marketing and as a special attraction of daring stunts to be performed from this airship to entice summer visitors to a new Long Beach oceanfront amusement park, The Pike, at the former Pine Avenue Pier, marking the beginning of aviation history in the city. Simultaneously, shortly after Wilbur and Orville Wright's 1903 successful demonstration of an airplane's capability of powered sustained flight, California's enthusiasm for flying began and intensified during the next few decades. The state's clear skies, moderate climate, and abundant cheap land became tools to promote aeronautics and aviation in the development of aircraft and airfields, as airports were first called, and in the attraction of aviators, air machine builders, risk-takers, and entrepreneurs. Airfields became symbols of the future as Southern California was starting its ascent to being the aviation capital of the United States.²

² Kevin Starr, *Material Dreams: Southern California Through the 1920s* (New York, NY: Oxford University Press, 1991), 115; Sean Belk, "A century of Aviation History in Long Beach" in "The Centennial of the First Transcontinental Flight" special issue, Presented by the First Transcontinental Flight Centennial Celebration Committee and the *Long Beach Business Journal*, December 6, 2011, 13; Claudine Burnett, *Soaring Skyward: A History of Aviation in and around Long Beach, California* (Bloomington, IN: AuthorHouse, 2011), 3-4, 6, 84-85; Rosa Maria Moller, "Aerospace states' incentives to attract the industry: an update" (Sacramento, CA: California State Library, California Research Bureau, 2008.), 9, acc. June 1, 2023, <https://www.library.ca.gov/wp-content/uploads/crb-reports/08-005.pdf>.

In this era, flying in an airplane was not only adventurous and very dangerous with many early aviators dying in crashes — but it was also viewed by many as technological progress towards a new modern, alluring and potentially practical method of transportation. The Los Angeles-based Aero Club of California, established in 1908, was one of the first in the U.S. Members pooled their brain power and other resources to build a variety of flying machines which were exhibited at its first local aviation show in California, also in 1908. At a time when most people had never seen anyone fly in the sky in any type of airship, in 1910 the Los Angeles Merchants and Manufacturers Association (a Chamber of Commerce type group) seized the opportunity to join with event promoters to stage the Los Angeles International Air Meet, which the members viewed as an economic development and marketing tool to encourage people to visit, move to and invest in the region. A hill at Dominguez Ranch, in what is today called the City of Carson, was selected as the event site. This location was next door to the City of Long Beach and less than ten miles north from its beaches, which served as its original airfield before the 1920s. The association and the air meet organizing team raised the money to produce a ten-day program held from January 10-20 that was the first official, major international air show on U.S. soil, after a very successful one held in August 1909 in Rheims, France. The Southern California competition featured American and European pilots of monoplanes, biplanes, hot air balloons, dirigible airships (blimps), and a few experimental machines that never got off the ground in competition for prize money.³

³ Belk, 13; Burnett, 2011, 25; “World’s Progress Shown in a New Light by Week’s Triumphs at Aviation Meet,” *Los Angeles Times*, Jan. 16, 1910, P. II, 1; Starr, 115; David D. Hatfield, *Dominguez Air Meet* (Inglewood, CA: Northrop University Press, 1976), 3-5; William A. Schoneberger, *California Wings: A History of Aviation in the Golden State* (Woodland Hills, CA: Windsor Publications, Inc., 1984), 20; In 1910 the population of the City of Los Angeles was 319,198 and the County 507,131, the City of Long Beach, 17,809, 1910 U.S. Census. Dominguez Ranch was an

The U.S. became the site of this 1910 international air meet after American aviator and aircraft builder Glenn Curtiss won the August 1909 Rheims competition with the rules specifying that the winning nation would host the next air meet. Curtiss, based in Hammondsport, New York and his flying colleagues brought this event to Southern California because of the mild winter weather and wide-open spaces. They were also familiar with Dick Ferris, a balloon enthusiast who was building a good reputation for promoting civic activities such as the first auto show in Southern California (1907) and the Panama Canal Exposition in San Diego (1915). They engaged him, and promote Ferris did, with the *Los Angeles Times* calling this air meet “one of the greatest public events in the history of the West.” It also marked the advent of Southern California’s aviation age as the City of Los Angeles and vicinity were becoming internationally significant due to the film industry, oil, and its new port. Transported by Henry Huntington’s trains and streetcars, about 254,000 fascinated spectators from all over Southern California and beyond bought tickets to attend the event. Spectators had to walk a half mile to the airfield from the Dominguez Junction stop of the Southern Pacific train line. The automobile and paved roads for transport where not yet available to the masses, so only a few spectators ventured to the Dominguez Hill event via this transportation method. Others traveled to the event on horseback or in a horse drawn wagon or carriage. The spectator numbers were more than half of the population of the County of Los Angeles and the air meet made \$137,500, equivalent to \$4.2 million in 2023 dollars. Those who contributed to the aviation fund to produce the event, including railroad magnate Huntington and *Los Angeles*

unincorporated rural and sparsely populated area In this era. The City of Los Angeles and California under Spain, Mexico and the US was an established colonial settlement for more than a century by 1910. The City of Long Beach was incorporated in 1897 and the City of Carson in 1968.

Examiner newspaper owner William Randolph Hearst, were able to get their money back with a 14.5 percent bonus.⁴

Spectators attended from cities all over Southern California, other places in the U.S. and a few countries in Europe to view this historic aviation event. A *Los Angeles Times* writer noted that social barriers were relaxed as spectators up and down the social strata and across gender lines were talking to each other. This article did not speak about the spectators' races or ethnicities, but it can be assumed that Black, Latinx, Asian, Indigenous, and other persons of color community members were also caught up in the wonder of this history making event. As Dominguez Hill was the air meet event site on the first Spanish and Mexican era land grant Rancho San Pedro (also called Rancho Dominguez), Californios and more recent Mexican descendant people might have been inspired to attend the event because of the awareness of the Californio family that owned this land. The Wright Brothers even attended as spectators, but not as flyers. Chief Aeronaut of Union Army's Observation Balloon Corp during the Civil War, who some have claimed as the "Father of the United States Air Force," Thaddeus S.C. Lowe attended with his nine-year-old his granddaughter Florence Leontine Lowe, who began her early enthusiasm for aviation with him. She grew up to be a fiercely independent woman who became the pioneering, world-famous aviator "Pancho" Barnes. Aviation pioneer William Boeing attended. Although unsuccessful in his determination to get a ride in an airplane, Boeing went back to Seattle, Washington resolute to learn more about aeronauts and was eventually

⁴ Hatfield, 3, 149; Burnett, 2011, 26; *Los Angeles Times*, Jan. 16, 1910, P. II, 1; "Money Back With Bonus," *Los Angeles Times*, Jan. 20, 1910, P. II, 1; "Dividends For Public Spirit. First Aviation Meet Repays Backers Handsomely," *Los Angeles Times*, Mar. 12, 1912, P. II, 1; Starr, 90-91, 115; The Port of Long Beach was founded in 1911, Port of Long Beach, acc. May 22, 2023, <https://polb.com/port-info/history/#historical-publications>.

an important shaper of the aviation industry in Southern California, the nation and abroad. It can safely be said that every relevant American in aviation who was a flyer, potential manufacturer or investor in aviation at the time was in attendance.⁵

Even without aviators flying in the air meet, Long Beach citizens actively contributed to and participated with nearly half the city's population attending. The city's businesses supplied six-thousand chairs for the box seats and the tents which sheltered the airplanes, other flying machines, and concessions. R.D. Horton of the Art Theatre of Long Beach was the official announcer or master of ceremony and the Municipal Band provided entertainment with hopes they would inspire visitors to travel to Long Beach to hear them play again. Long Beach and other regional school children and college students were given days off to attend as educators thought it was a good learning opportunity to see the flying machines in the air and on the ground where they could be examined close up. Many women's groups also attended.⁶

The air meet received press and moving picture/newsreel program coverage from outlets around the world, helping to establish air flight as something that was not a novelty. The world got the opportunity to view the superiority of the biplane for flight and the airplane manufacturers would take this cue to build them as warplanes for World War I (1914–1918). The air meet site — considered the birthplace California aviation, today houses the Dominguez

⁵ Californios were the Spanish and Mexican people of California before the territory became part of the United States in 1848 or their descendants. James J. Rawls and Walton Bean, *California: An Interpretive History* 8th ed. (New York, NY: McGraw-Hill, 2003), 59; J. Wesley Neal, "America's First International Air Meet," *The Historical Society of Southern California Quarterly*, Vol. 43, No. 4 (Dec., 1961): 373-374, 380-381, 388; "Aviation Field Sidelights," *Los Angeles Times*, Jan. 13, 1910, P. II, 7; "History of Dominguez Rancho," Dominguez Rancho Museum website, acc. June 15, 2023, <https://dominguezrancho.org/domingo-rancho-history/>; Lauren Kessler, *The Happy Bottom Riding Club: The Life and Times of Pancho Barnes* (New York, NY: Random House, Inc., 2000), 5-10; *A Brief History of the Boeing Company* (Bellevue, WA: Boeing Historical Services, 2002), 8.

⁶ Hatfield, 6-7; Burnett, 2011, 28-29; "Aviation Meet is Started," *Long Beach Press-Telegram*, Jan. 10, 1910, 1, 8; "Local band Boosting," *The Long Beach Press-Telegram*, Jan. 13, 1910, 1.

Technology Center, which has over the years included tenants such as aerospace firms TRW and Northrop Grumman, and is located adjacent to California State University, Dominguez Hills. The streets around this industrial center are named for Glenn Curtiss and other aviation pioneers who participated in the historic event. The site has been identified as California Historical Landmark Number 718 and marked with a plaque to commemorate this almost forgotten history. The continued presence of the aviation and aerospace industry as an economic driver in the Southern California region and national economies is the biggest resonating legacy of this pivotal January 1910, two-week event.⁷

⁷ Neal, 403-404; Dominguez Technology Center, Watson Land Company website, acc. July 18, 2023, <https://www.watsonlandcompany.com/about-us/>; CHL No. 718, Site of Initial United States Air Meet – Los Angeles. California Historical Landmarks website, acc. July 18, 2023, <https://www.californiahistoricallandmarks.com/landmarks/chl-718>; Hadley Meares, “How the aviation industry shaped Los Angeles,” *la.curbed.com*, July 8, 2019, acc. July 19, 2023, <https://la.curbed.com/2019/7/8/20684245/aerospace-southern-california-history-documentary-blue-sky>; Don Berliner, “The Big Race of 1910: How the first U.S. air race launched an aviation tradition,” *Smithsonian Air & Space Magazine*, January 2010, acc. July 18, 2023, <https://www.smithsonianmag.com/air-space-magazine/the-big-race-of-1910-9075126/>.

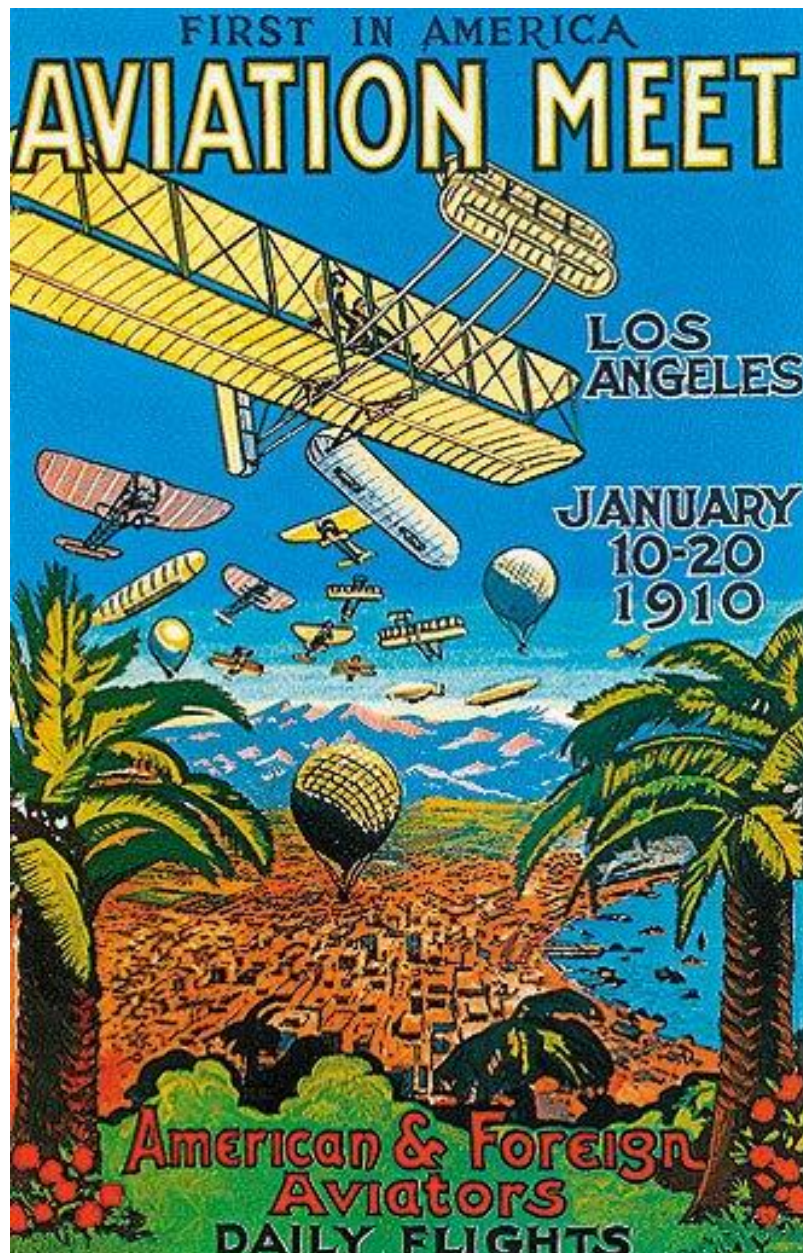


Fig. 3. This is a poster for the first Los Angeles International Air Meet held in the United States at Dominguez Hill in what is today Carson, CA, January 10–20, 1910. Three other air meets would be held from December 24, 1910 to January 3, 1911, January 20–28, 1912, and January 29 to February 5, 1913, respectively.

Image: <https://www.smithsonianmag.com/air-space-magazine/the-big-race-of-1910-9075126/>

Courtesy of John Garrett Collection. Don Berliner, "The Big race of 1910," *Smithsonian Air & Space Magazine*, January 2010, item 11 of 15 photograph series.



Fig. 4. Aviators on Foot, Dominguez Field, 1910. There were four International Aviation Meets held at Dominguez Field, Los Angeles. The first ran from Jan. 10-20, 1910; the second from December 24-30, 1910 to January 3, 1911, the third January 20-28, 1912, and the final one, January 29 to February 5, 1913. Seven men march in line in front of grand stand. They are identified as follows (left to right): Jerome Fanguilla, manager for Curtiss; Glenn Curtiss; Didier Masson; Louis Paulhan; Charles Mescarel; Charles F. Willard; Hilory [sic] Lincoln Beachey. Identification supplied by Roy Knabenshue in June of 1958.

Image: <https://tessa2.lapl.org/digital/collection/photos/id/83016/rec/79>
Digital Collection of Los Angeles Public Library



Fig. 5. Aviation pioneer Glenn Curtiss at the wheel of an airplane at Dominguez Field, ca.1910 at the first Los Angeles International Air Meet at Dominguez Hill in what is today known as the City of Carson. The U.S. became the site of this 1910 international air meet after American aviator and aircraft builder Curtiss won the August 1909 Rheims competition with the rules specifying that the winning nation would host the next air meet. Los Angeles was chosen as the site due to the favorable weather and other advantages for the January 1910 event.

Image: <https://doi.org/10.25549/chs-m13368>

California Historical Society Collection, 1860-1960, University of Southern California Libraries Special Collections

After this 1910 air meet and success with a hydroplane project — where an airplane flew from the deck of the USS Birmingham to the shore in New York — Curtiss established a West coast base for teaching flying to Army and Naval personnel in San Diego at a location that is now part of the Naval Air Station North Island. This location is identified as the “Birthplace of Naval Aviation” and it’s where Curtiss gained the title of the “Father of American Naval Aviation.” The Spreckels family (owners of the sugar company) and the Aero Club of San Diego supported this project, where in addition to training military and also civilian aviators, Curtiss worked on development of a pontoon design for an airplane to take off and land on water that was of great interest to the Navy. Curtiss eventually sold this first amphibious airplane to the Navy and trained many new pilots from different countries around the world in San Diego and other places where he opened flight schools in the U.S.⁸

Curtiss believed teaching people to fly and understanding the science of flight opened the doors for aviation technology development and sales. It is said he was willing to teach almost anyone to be an pilot. Emory C. Malick (1881-1958) traveled in 1912 to San Diego from Pennsylvania for flight training at the Curtiss School of Aviation. He is credited with being the first known licensed African American airplane pilot in the world with his credentials issued by the Fédération Aéronautique Internationale of France, the global aviation governing body at the time. This training would by inference mean Malick was probably the first African American pilot to fly in the California blue sky. This story remained buried for decades until the Smithsonian *Air & Space* magazine article, “The Unrecognized First” by Rebecca Maksiel was

⁸ Schoneberger, 25; Moller, 2.

published in March 2011. Much of the justification for the claims about his racial identity came from a Malick descendant, Mary Groce and photographs in her possession.⁹

Co-author of this essay, Philip Hart, did a profile on Malick in his 2013 Oxford African American Studies Center “Photo Essay — Early African American Aviators” and noted that the census identified Malick as being either White or Mulatto. By September 19, 2023 the *Air & Space* magazine determined that Malick self-identified as White, hence the publication decided he could not be credited with being the first licensed Black American pilot and retracted the March 2011 article. The statement accompanying the retraction noted that Malick continues to be an important contributor to early American aviation development whatever his racial identity. Hart speculated that Malick may have been a Black man who was passing for White, not an uncommon occurrence for light complexion Black people in a racially stratified Jim Crow America. Malick ended his flying aviation career in 1928, after two airplane crashes where he and his passengers were injured. In the second crash, his passenger died. Though for the rest of his life from the ground Malick continued as a supporter of the aviation field’s development in Pennsylvania and New Jersey. The confusion and controversy around Malick’s racial identity continues today.¹⁰

⁹ The Fédération Aéronautique Internationale began in France in 1905 as the governing body for aviation and issued pilot’s licenses before this practice began in the United States in the mid-1920s. Philip S. Hart, “Photo Essay - Early African American Aviators,” Oxford African American Studies Center, original publication date 2013, acc. Aug. 21, 2023, <https://tinyurl.com/HartPhotoEssay>; “Teaching the World to Fly,” GlennHCurtissMuseum.org, acc. Aug. 21, 2023, <https://glennhcurtisismuseum.org/education/teaching-the-world-to-fly/>; Rebecca Maksel, “The Unrecognized first African-American pilot, wasn’t known to historians until recently,” Smithsonian *Air & Space* Magazine, March 2011, acc. Aug. 21, 2023, <https://www.smithsonianmag.com/air-space-magazine/the-unrecognized-first-79496373/>; 1910 U.S. Census.

¹⁰ Hart, “Photo Essay - Early African American Aviators”; Maksel, “The Unrecognized first African-American pilot...”;

It is well documented that Eugene Jacques Bullard (1895-1961), from Columbus, Georgia, earned his pilot's license in France in May 1917 and flew for the French Flying Corps in World War I. Bullard was the world's first African American combat pilot and flew twenty missions against German aircraft — shooting down at least five German planes. He received several awards for his bravery and the nickname the “Black Swallow of Death.”¹¹

Japanese naval officer, engineer, industrialist, and cabinet minister Chikuhei Nakajima was also a 1912 student at Curtiss 'San Diego aviation school. He became the third Japanese person to receive an airplane pilot's license after his 1912 graduation. Other Japanese students attended the Southern California school and successfully graduated. Nakajima would go on to form the Nakajima Aircraft Company, a Japanese aircraft and engine manufacturer that is today known as the Subaru Corporation which is an automobile and aircraft manufacturer.¹²

Long Beach carried forward its infatuation with flying endeavors after the 1905 ballooning demonstration at The Pike and its 1910 participation in the first international aviation meet in the U.S. held at nearby Dominguez Hill. The Birnie Brothers, Charles Day, the French Brothers, and a few other manufacturers began constructing and flying their own aircraft before the U.S. entered War World I in 1917. Bicycle shop owner Charles Day, after catching the flying fever in Long Beach, began to concentrate on aviation. He would take his

¹¹ Hart, “Photo Essay - Early African American Aviators.”

¹² “Teaching the World to Fly,” GlennHCurtissMuseum.org, acc. Aug. 21, 2023, <https://glennhcurtisismuseum.org/education/teaching-the-world-to-fly/>; “The history and unknown story of Subaru,” Piece of Japan, acc. Aug. 21, 2023, <https://piece-of-japan.com/investing/car/subaru-corporation.html>; “Subaru history, profile and history video,” CompaniesHistory.com, acc. Aug. 21, 2023, <https://www.companieshistory.com/subaru/>.

airplane design skills for production to Glenn L. Martin's company and others, including in China.¹³

In 1909, nearby in Santa Ana in Orange County, Martin and Day would construct and fly the first airplane in California powered by a Ford engine. This was the third plane to be flown in the U.S. after that of the Wrights and Curtiss. Martin's mother, Minta, became known as the "First Lady of Aviation" due to her support of her son's pioneering work in aviation. Many credit Martin as establishing California's aviation industry as the pioneer airplane manufacturer. His first company formed in 1910 was the Glenn L. Martin Company in Orange County. To inspire others to fly, he promoted aviation and his airplanes in flying exhibitions and by using his appearance and his aircraft in major motion pictures. He advertised his company's flying fields using his airplanes at Griffith Park and Los Angeles Harbor. As Long Beach is part of the harbor region, it can be assumed Martin did flying exhibitions over the city.¹⁴

Seeing the value of parachutes in garnering publicity, Martin (b.1886) made history in 1913 with Georgia "Tiny" Broadwick (b. 1893) when she became the first woman to parachute from an airplane he manufactured and was piloting. Martin first met Tiny Broadwick and her adoptive father, Charles Broadwick at the third Dominguez air meet in 1912 where she had made two jumps with a parachute that the elder Broadwick had designed. A migrant to California from North Carolina, Tiny Broadwick — earning her nickname because she weighed only eighty-five pounds and was just five feet tall — would perform many parachute jumps in front of Long Beach's Pike amusement park. She received many accolades as a pioneering figure

¹³ Burnett, 2011, 36, 43-44, 47, 51.

¹⁴ Burnett, 2011, 66; Schoneberger, 23-25.

in aviation history and later in life, she returned to Long Beach, where she died in 1979. Charles Broadwick for his part, was interested in the new aircraft flying machines. In addition to manufacturing new aircraft, Martin also had an interest in the development of parachutes as an emergency safety device for aviators and passengers, with both military and civilian flying applications. Glenn Martin improved upon Charles Broadwick's parachute design to make one that would be more compact and could be manually opened by the user when ready.¹⁵

As compared to many early aviation pioneers, Martin would live a long life with many significant contributions to the aeronautic industry that emerged in the twentieth century; he died in 1959 at 69. He would work with other aviation pioneers, some associated with Long Beach over the years, including Donald Douglas, Allan and Malcolm Lockheed, Jack Northrop, Gerard Vultee, Claude Ryan, Howard Hughes and James Kindelberger (who became Douglas ' chief engineer and later president of North American Aviation). After several mergers the Martin Company would eventually become Lockheed Martin Corporation, now a global aeronautics, aerospace and defense company with a base in El Segundo, California, not far from Long Beach.¹⁶

¹⁵ Burnett, 2011, 14-16, 68; Schoneberger, 24-25; Moller, 2.

¹⁶ Schoneberger, 24-25; Moller, 2.



Fig. 6. Emory C. Malick, Curtiss Aviation School, 1912. Malick began his interest in aviation with gliders around 1910 in his home state of Pennsylvania. He earned his pilot's license via training at the Curtiss Aviation School in San Diego from the Fédération Aéronautique Internationale of France that was at the time global aviation licensing and governing organization. Although significant as an early aviator, there is controversy around how Malick viewed his racial identity and whether he should be identified as the first African American to earn a pilot's license (#105) in the U.S. in 1912. Some of his descendants dispute that he was a person of color and argued he identified himself as White.

Image: <https://glennhcurtisismuseum.org/education/teaching-the-world-to-fly/>
Courtesy of Glenn H. Curtiss Museum Hammondsport, NY



Fig. 7. Glenn L. Martin at the controls of one of his early airplanes, 1910. Many credit Martin as establishing California's aviation industry as the pioneer airplane manufacturer. His first company formed in 1910 was the Glenn L. Martin Company in Orange County. Martin would work with many aviation pioneers, some associated with Long Beach over the years. The Martin Company still exists today as Lockheed Martin Corporation, a global aeronautics, aerospace and defense company, based in Southern California.

Image: 00007898, <https://tessa2.lapl.org/digital/collection/photos/id/83059>
Digital Collection of Los Angeles Public Library



Fig. 8. Glenn Martin and his mother, Minta Martin pose during an exhibition flight in Newport Beach. Minta was considered the “First Lady of Aviation” due to her strong support of her son’s pioneering work in aviation. Martin made the first powered airplane flight in Orange County in 1910.

Image: <http://www.oac.cdlib.org/ark:/13030/c8ff3r3m/?layout=metadata&brand=oac4>
California State University, Fullerton, University Archives and Special Collections



Fig. 9. View of "Tiny" Broadwick as she prepares to parachute jump from an airplane, ca. 1913. Georgia Ann Thompson Broadwick was a pioneering American parachutist. She was nicknamed "Tiny," as she weighed only eighty-five pounds and was five feet tall. Although she would eventually make her jumps from an airplane, in her earlier career she was jumping from balloons. Billed as "the doll girl," Tiny began performing aerial skydives and stunts while wearing a "life preserver" designed by her adoptive father, Charles Broadwick, a world famous parachute jumper. Among her many other achievements, she was the first woman to parachute from an airplane, which she accomplished on June 21, 1913, over Los Angeles, with aviator Glenn L. Martin as the pilot. She was also the first woman to parachute into water.

Image caption reads: "Georgia Ann Thompson Broadwick...,"
[https://waterandpower.org/museum/Aviation_in_Early_LA_\(Page_1\).html](https://waterandpower.org/museum/Aviation_in_Early_LA_(Page_1).html)
Aviation in Early Los Angeles, Water and Power Associations Collection

The first two Long Beach officially licensed airplane pilots, Frank L. Champion and Earl S. Daugherty began their intense infatuation with flying at the 1910 air meet. Originally from Oklahoma, Champion (b. 1884) was a photographer who co-owned a Long Beach photo studio business and was inspired to take to the skies as a professional flyer when he worked as a press photographer for the *Los Angeles Examiner* newspaper at the air meet. Later that year Champion travelled to the United Kingdom for instruction at the Bleriot School of Aviation in London. He was trained in flying by the renowned French airplane designer and aviator Louis Bleriot, who was the first to fly across the twenty-mile, English Channel in thirty-seven minutes in 1909, showing the British that their country could potentially be attacked from the air in the future. Once Champion got back to California in 1911, he was performing air stunt flying (barnstorming) up and down the state. As the first officially licensed flyer in Long Beach, by late 1911 Champion had trained Daugherty to be an airplane pilot. Daugherty (b. 1887) was born in Ames, Iowa and with his parents relocated to Long Beach in his formative adolescent years. Both Champion and Daugherty would go on to beat local flight speed records and thrill audiences with their daring air performances. By 1912-1913 the two men were building new airplanes in the basement of Long Beach's Virginia Hotel where they used the adjacent shoreline as an airfield. They would follow up with other aviation accomplishments before they were both killed in separate aviation accidents before 1930. The thirty-three, Champion was killed in Kochi, Japan when his airplane fell four-thousand feet to the ground at an air exhibition event in 1917. More about Daugherty's death a little later.¹⁷

¹⁷ Burnett, 2011, 58, 54; Schoneberger, 56-57.

Long Beach citizens were enthusiastic supporters of the second Los Angeles International Air Meet held at Dominguez Hill from December 24, 1910 to January 3, 1911. Although none of the city's pilots flew in competitions, the Chamber of Commerce sponsored "Long Beach Day" at the meet and paid for a \$500 sterling silver cup that would be awarded to the aviator making the highest altitude flight. Southern California local Glenn Martin competed in the novice category to win \$450 in prize money for a twelve-minute flight. On Long Beach Day, December 28, 1910, a very successful day of the event, aviators Charles Willard and Arch Hoxsey dropped ten-thousand flyers with advertisements about Long Beach printed on them on the spectators below. Long Beach business owners thought the event publicity would be worth the cost to have the city's name circulate throughout the country.¹⁸

Before the third Los Angeles International Air Meet, January 20-28, 1912 commenced, also held at Dominguez Hill, thirty-two-year-old Calbraith Perry "Cal" Rodgers completed the first transcontinental flight from Sheepshead Bay in Long Island, New York on the Atlantic Ocean to the Long Beach shore near where Pine Avenue ends today on December 10, 1911. The Pennsylvania native financed the eighty-four-day journey with a sponsorship deal from Armour Company of Chicago to advertise its new grape-flavored soft drink, Vin Fiz. Rodgers' airplane was called the Vin Fiz Flyer after the soda and its logo was painted on its underwings and rudder. The aircraft, a Wright EX-1 biplane, was one of the earliest airborne billboards. Long Beach Chamber of Commerce members led by Squire F. DuRee and the Pacific Electric Railway Company provided a \$1,000 sponsorship and paid for advertisements in Los Angeles

¹⁸ Burnett, 2011, 31; 23-24.

newspapers to promote the completion of Rodgers' journey on the Pacific Ocean shoreline in Long Beach. City leaders believed Long Beach would get extensive publicity from Rodgers' flight, which was considered to be a critical human achievement and an inspiration to many early aviation pioneers. After making aviation history, Rodgers crashed his plane just a few months later in the Pacific Ocean near the Long Beach Pine Avenue Pier and died on April 3, 1912. His Vin Fiz Flyer is on display at the Smithsonian National Air and Space Museum. As of 2022 a replica of this pioneering flying machine was put on display in the San Diego Air and Space Museum to honor and expose people to the regional and national history of the landing of the first transcontinental flight.¹⁹

Although no Long Beach airplane pilots participated in the third Dominguez Hill air meet, other pilots did engage in what became an air circus with lots of stunt flying performances rather than an exhibition of aerial altitude and endurance tests like earlier events. Even with this change this air meet was important nonetheless in aviation history for Southern California and beyond. Although not so remembered in popular memory today, aviator Blanche Stuart Scott (1884-1970) was the first woman pilot to perform in the 1912 Dominguez Hill air meet, bringing publicity to the event. She was one of the first two American women to fly an airplane in 1910. Before becoming an aviator, in the early 1900s another of her

¹⁹ Schoneberger, 26; Burnett, 2011, 61-64; "\$1000 in Cash is Assured Famous Aviator," *Long Beach Press-Telegram*, Nov. 9, 1911, 2; Sean Belk, "The First U.S. Transcontinental Flight: Celebrating 100 Years of Aviation History" in "The Centennial of the First Transcontinental Flight" special issue, Dec. 6, 2011, 2-3; A replica of the Vin Fiz airplane was going to be placed in the Long Beach Arena in 1911, but plans changed and it wound up in San Diego. Sean Belk, "'Vin Fiz' Replica Lands In Long Beach Arena" in "The Centennial of the First Transcontinental Flight" special issue, Dec. 6, 2011, 4; Belk, "Smithsonian's 'Pioneers Of Flight' Exhibit Features Original 'Vin Fiz'" in "The Centennial of the First Transcontinental Flight" special issue, Dec. 6, 2011, 6 and "Vin Fiz Flies in the Museum's Rotunda," San Diego Air & Space Museum, acc. Sept. 11, 2023, <https://sandiegoairandspace.org/newsletters/article/vin-fiz-flies-in-the-museums-rotunda>.

adventures and firsts was that Scott became the second woman to make a transcontinental road trip, driving from New York to San Francisco in sixty-eight days. She met aviation pioneer Glenn Martin who also flew in this event and she became a test pilot for his new airplane designs and also was part of his stunt flying team. She earned the nickname “Tomboy of the Air” due to her stunt flying antics. These Scott adventurous firsts were occurring before women got the right to vote in 1920. Her renowned career as aviation pioneer later extended into a career as a film and radio personality.²⁰

Performing aerial stunts with the best aviators of the world — over the heads of large crowds at the 1912 air meet — was Tom Gunn (1890-1925), the first licensed Chinese American pilot with credentials issued from the Fédération Aéronautique Internationale. It was said Gunn was sponsored by China in the event and that he later helped build China’s air force. Born in San Francisco to Chinese immigrant parents, Gunn was also among the first Americans to earn a pilot’s license. The *Los Angeles Evening Express* reported Gunn said he was making flights to interest his Chinese American and Chinese national countrymen in aviation. The publicity Gunn received in local, national and international newspapers during this air meet and others later, exposed many people to his expertise and exploits, including the Asian communities in the U.S. and beyond. He became an aircraft builder for his own airplanes, flying many times in ones he constructed, sometimes through modifying aircraft designed by other early builders such as

²⁰ Burnett, 2011, 36. “More stunts and less aneroid. Aviation show to be three-ring air circus,” *Los Angeles Times*, Jan. 3, 1912, P. III, 1-2; Blanche Scott Images, San Diego Air and Space Museum, acc. Aug. 15, 2023, <https://sandiegoairandspace.org/collection/item/blanche-stuart-scott-images>; Paul Glenshaw, “Fabulist of the Air,” *Smithsonian Magazine*, June 2019, acc. Aug. 15, 2023, <https://www.youtube.com/watch?v=52GqNQbggZA>; “Blanche Stuart Scott: The First Female American Aviator,” Aerospace Pioneers, Federal Aviation Administration, acc. Aug. 15, 2023, <https://www.faa.gov/about/history/pioneers>.

Glenn Curtiss, one of his mentors. Gunn attended Curtiss 'flight school and was in the second graduating class in San Diego at what was Curtiss 'new West Coast base. Curtiss would eventually work with the Army and Navy on pioneering aviation development projects. Gunn took his flying stunt performances and aircraft building experience to Hawaii and around Pacific Rim including in California's San Francisco-Oakland Bay area, China and the Philippines, where in the latter place he is credited with introducing air mail service and opening a flight school. Although his name may not be a household one today, Gunn is viewed as a significant influencer of early Pacific aviation development.²¹

The air meet era at Dominguez Hill ended with one last event on January 29 to February 5, 1913. Long Beach flyer Earl Daugherty showed off his skills on "Long Beach Day," January 31, 1913. During the meet in a Gage passenger biplane, Daugherty won the passenger-carrying event with two women on board, Eleanor Blevins and Nellie Shawl. This Daugherty flight event was one of the tests to determine if airplanes carrying a pilot and a gunner could be useful combat warfare tools. Another test was conducted whereby Daugherty and another pilot Fred DeKor who was in a Curtiss airplane, each carried military riflemen who were able to handle their guns and shoot at their targets while flying as passengers. The accomplishment of these two pilots would go on to be very meaningful in World War I combat which would be a testing

²¹ Burnett 2011, 36; "First Chinese Airman Makes Good Flight," *Los Angeles Evening Express*, Jan. 19, 1912, 4; R.A. Wynne, "Exciting Duel High Among Fleecy Clouds," *Los Angeles Times*, Jan. 22, 1912, P. III, 1; "Chinese To Fly At Dominguez," *The Pomona Progress*, Jan. 26, 1912, 1; "Chinese Aviator to Fly Tomorrow," *Los Angeles Evening Express*, Jan. 20, 1912, 3; "Miss Blanche Scott and Tom Gunn, Chinese Aviator, Win Applause; Flyers Startle Throngs in Field by Reckless Dips Close to their Head," *The San Francisco Examiner*, Feb. 19, 1912, 1; "Tom Gunn, Chinese American Aviator" video, Young Historians, Living Histories, Smithsonian Asian Pacific American Center, acc. Aug. 15, 2023, <https://www.youtube.com/watch?v=52GqNQbggZA>; "Teaching the World to Fly," GlennHCurtissMuseum.org, acc. Aug. 21, 2023, <https://glennhcurtisismuseum.org/education/teaching-the-world-to-fly/>.

ground for the capabilities of aviators and airplanes as warfare tools. Some of this aviation innovations that emerged during the war years had future peace time civilian aviation applications.²²

Daugherty and fellow aviation-minded businessmen of Long Beach would participate in various air record competitions and stunt performances around the U.S. as they built airplanes they would fly from the shore of Long Beach until the threat of World War I enlisted theirs and others into service. The U.S. Navy would also begin training pilots on the Long Beach shoreline in 1915. Daugherty would become a civilian and military flight instructor for the U.S. Army rising to the rank of lieutenant. He spent much of his World War I time at March Air Force Base in Riverside.²³

²² Burnett, 2011, 39-40; "Stardust Of early Aviation: Who Was Earl Daugherty?," *Wings Over Long Beach Aviation Expo* event (Nov. 2–3, 1996) publication, 26.

²³ Burnett, 2011, 81-82; "Stardust Of early Aviation: Who Was earl Daugherty?," *Wings Over Long Beach Aviation Expo* event (Nov. 2–3, 1996) publication, 26.



Fig. 10. Frank L. Champion, Long Beach aviator. Champion and Earl Daugherty began their intense infatuation with flying at the first 1910 Los Angeles International Air Meet at Dominguez Hill in what is today the City of Carson, a short distance north of downtown Long Beach. He traveled to the United Kingdom for his flight instruction and was the first officially licensed flyer in Long Beach. By late 1911 Champion had trained Daugherty to be an airplane pilot. One of Champion's flying records was that he flew a monoplane an estimated fifty-five miles in fifty-minutes from Oceanside to Long Beach, California.

Image: LBPL_11308.tiff,

<https://lbpl.contentdm.oclc.org/digital/collection/p17164coll3/id/5034/rec/10>

Long Beach Public Library Digital Archive



Fig. 11. Earl Daugherty sits in his airplane with his first passenger. Nell Holeman (née Shall) accompanied Daugherty on the flight that would qualify him for his aviation license in 1911.

Long Beach Airport Archives



Fig. 12. Borel Morane aircraft with Bee Rusche (left) and Billie Peterson of the Women's Aircraft Mechanics Service Squadron, assembling the 1911 Borel loaned to Kay Daugherty for an exhibition at the Long Beach Airport, 1944. Pioneer Long Beach aviator Earl Daugherty purchased and used this airplane that was the fastest monoplane of its era.

Long Beach Airport Archives

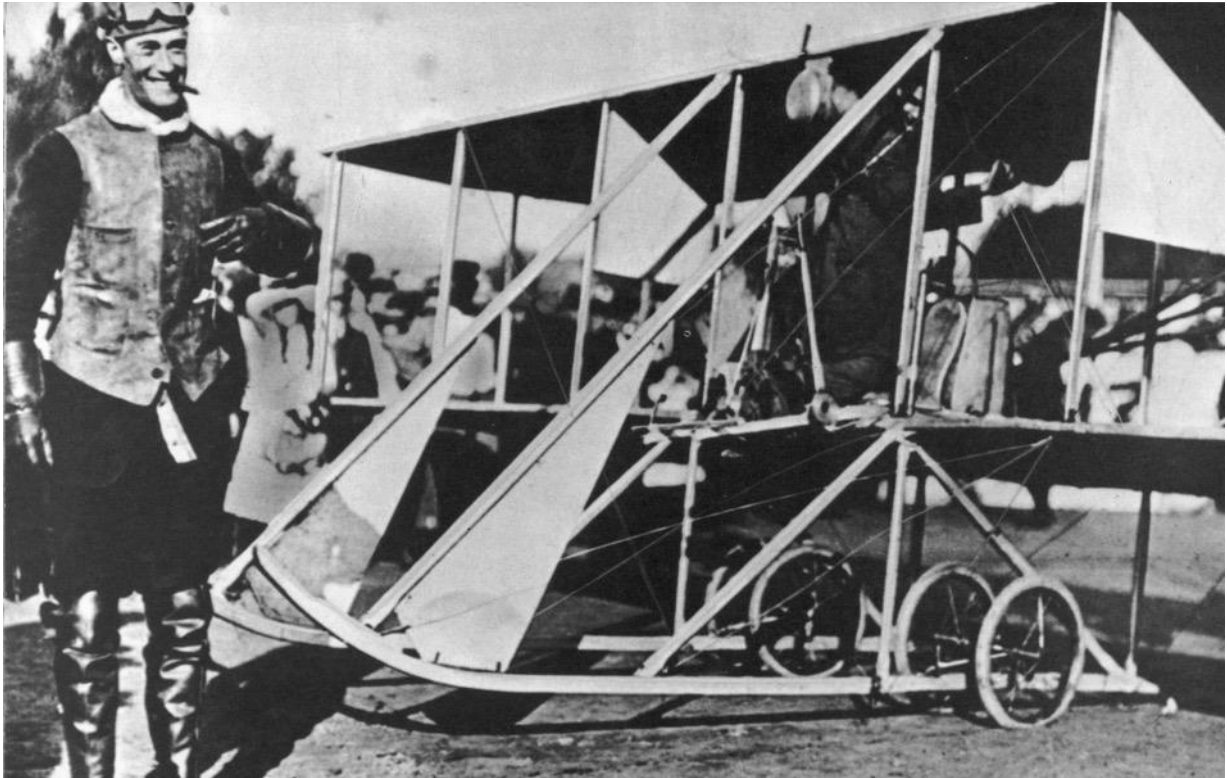


Fig. 13. Calbraith Perry "Cal" Rodgers completed the first transcontinental flight from Sheepshead Bay, NY on the Atlantic Ocean to the City of Long Beach on the shores of the Pacific Ocean on December 10, 1911. Rodgers obtained a sponsorship deal from Armour Company of Chicago, IL to advertise its new grape-flavored soft drink, Vin Fiz. His Wright EX-1 biplane was called the Vin Fiz Flyer after the soda. With Armour's soda logo painted on its underwings and rudder, the Vin Fiz Flyer was one of the earliest airborne billboards.

Long Beach Airport Archives



Fig. 14. Blanche Stuart Scott in her Curtiss Model D biplane, was the first woman to fly and to participate in the 1912 Los Angeles International Aviation Meet held on Dominguez Hill in what is today, Carson. This event was also known as "The People's Aviation Meet." It was the third aviation meet held in area. Lincoln Beachey was one of the star aviators at the meet which also featured Charles Willard, Scott, Phil Parmelee, Cliff Turpin, Glenn Martin, Howard Gill, and Farnum Fish, among others.

Image: <https://cdm16003.contentdm.oclc.org/digital/collection/p15150coll2/id/8272>
C.C. Pierce Collection of Photographs, Huntington Digital Library

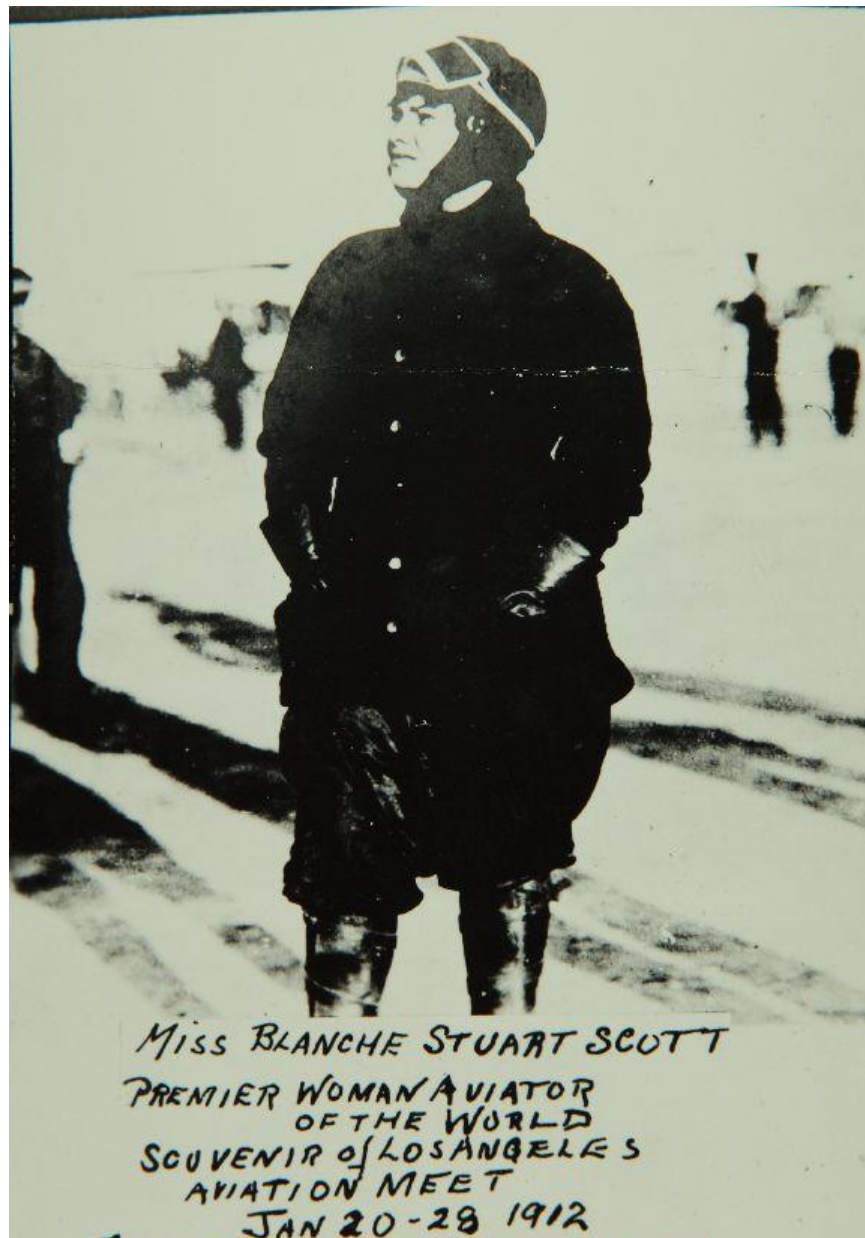


Fig. 15. Blanche Stuart Scott in her souvenir photograph for the Los Angeles International Aviation Meet held on Dominguez Hill in what is known today as the City of Carson, CA, 1912. Aviation pioneer Glenn Curtiss trained Scott to become an aviator at his New York state area school.

Image: <https://sandiegoairandspace.org/collection/item/blanche-stuart-scott-images>
San Diego Air and Space Museum



Fig. 16. Aviator Tom Gunn (left) posing for a picture with one of the Eaton brothers at the Los Angeles Air Meet at Dominguez Hill, 1910. They are standing in front of a wood and canvas biplane. Gunn was the first Chinese American person to learn to fly and was an aviator participant in the Third Los Angeles Air Meet at Dominguez Hill in 1912.

Image: <https://doi.org/10.25549/chs-m13385>

California Historical Society Collection, 1860-1960, University of Southern California Libraries Special Collections



Fig. 17. Pictured is the “Daugherty Stupar Tractor” also called the Long Beach Flyer designed by Earl Daugherty and built by Max Stupar, no date. In the pilot’s seat is John Montijo (center), another significant Long Beach aviation pioneer and Daugherty is seated on the wing (right). This was the first airplane used to advertise the city. Daugherty’s design was showcased in the *Aero and Hydro Magazine*, November 14, 1914. The Daugherty Stupar Tractor was important in the quick changing design of aircraft in that it was powered by an engine in the front which was aerodynamically different from pervious airplane. This new design allowed for the airplane to be pulled rather than pushed which allowed for more versatility in use for the military and exhibition flying.

Long Beach Airport Archives



Fig. 18. The U.S. Army trained aviators at the Pacific Ocean shoreline in Long Beach before the city's first inland airfield was established by Earl Daugherty in 1919.

Long Beach Airport Archives

The Golden Age of Aviation (1918 – 1938)

Though machines of aviation and their flyers were still a novelty to many, the public's perception of the burgeoning industry was changing. Major accomplishments in California aviation occurred in the years surrounding World War I, including at Dominguez Hill, at Long Beach, at other places in Los Angeles County and around California. Some speculate that at the beginning of the Golden Age of Aviation, most of America's aviators were in California due to the early flying instruction of Glenn Curtiss, Glenn Martin and others. Surplus airplanes no longer needed for the war effort were available to buy cheaply for a new generation of risk-takers and entrepreneurs inspired to become aviators. Radio and film newsreels showcased their antics and heroism. Capital was becoming available for aviation projects for transportation of mail and passengers.²⁴

After the war, Earl Daugherty returned to Long Beach where in 1919 he opened the Daugherty School of Aviation in the northwestern section of the city at Bixby Road and Long Beach Boulevard in the Chateau Thierry Tract — named for the place where Americans fought a major battle in France during World War I. Though he believed aviation had a more important future than solely as entertainment, he continued participation in air performances and competitions as he trained pilots from a singular location in Long Beach at Chateau Thierry Tract. At this time, Daugherty also established a successful passenger carrying service and he was one of the earliest aerial photographers and filmmakers. He was a pioneer with other aviation entrepreneurs around the region who were starting to build civil airfields and other

²⁴ Schoneberger, 26-27, 30.; Burnett, 2011, 107.

aviation businesses. Like Curtiss and Martin, Daugherty was one of the early aviators to make money in aviation as a business endeavor.²⁵

In this time period, Long Beach city officials and the Chamber of Commerce had been informed by entrepreneurs in the burgeoning aviation industry there were potential business opportunities for California passenger, express and mail airplane services with Long Beach as a hub. But for these business lines to develop, there needed to be investment in the proper airfield infrastructure: a terminal with shops, hangars, gas tanks, airfields, and more. Daugherty saw an opportunity for new aviation endeavors. He proposed to city officials the idea of a public aviation field on land that he owned near his flight school at Long Beach Boulevard and Willow Street in 1920 which became Daugherty-Municipal Aviation Field, a public-private partnership. This was one of the first municipal airfields in a western U.S. city open to all visiting aviators and it was immediately successful.²⁶

As the city grew, proposals for new roads and other infrastructure development were emerging, and Long Beach officials determined a need for more space for a municipal airport that it had sole ownership and control of. In 1923, the City Manager Charles Windham recommended that a municipal airport be established. In 1923 or 1924 the Long Beach Aero club was formed to promote “aviation and allied interests in Long Beach and vicinity.” By 1927 the club was a chapter of the National Aeronautical Association with thirty-three members signed up. The officers during this period were: Captain William A. Frye, president; John G. Montijo, vice president; M.R. Blurton, second vice president; and Inez Donovan, secretary-

²⁵ Burnett, 2011, 81-82; “Earl S. Daugherty, Long Beach’s Pioneer Aviator,” Item xx156.017, Location 2D, Historical Society of Long Beach, March 15, 2023.

²⁶ Burnett, 2011, 82-84.

treasurer. The group supported weekly broadcasts on KFON radio to share their enthusiasm for flying and was an instrumental advocate of the City of Long Beach developing a municipal airport. Around this time in 1925, Long Beach officials ratified an aviation ordinance and appointed a municipal aviation commission which included “three of the best-known aviators on the Pacific Coast” — Earl Daugherty, Al Ebrite and John G. Montijo.²⁷

The city procured 150 acres at Cherry Avenue and Spring Street where the airport site is today with additional land acquired around the original site from the Montana Land Company in 1939. The city — at multiple times in subsequent decades — negotiated for additional land adjacent to the airport for its expansion. Marking the transition of airplane flight from being a novelty for recreation and entertainment to a tool for commerce and travel, the groundbreaking occurred November 26, 1923, and the new airport dedication took place in 1924. The old original Daugherty Aviation Field closed in 1925. The new city of Long Beach owned airport was also eventually named Daugherty Field-Long Beach Municipal Airport to honor the aviation visionary who would die with two passengers in 1928. Daugherty, Warren E. “Monty” Monfort, *Press-Telegram* editor and Elmer M. Starr, an owner of the Pacific Engraving Company fatally crashed from two-thousand feet in the air not far from the airport when two right wing sections broke away from the fuselage of Daugherty’s new Laird biplane just ten minutes into the flight. Today the airfield is called the shorter version of its longer name, Long

²⁷ Burnett, 2011, 87; “Air Ordinance Prepared by Aviators,” *Press-Telegram*, Dec. 1, 1925, 1; Walter H. Case, *History of Long Beach and Vicinity* (New York, NY: Arno Press, 1974), (quote) 651, (quote) 652; “The Aero Club of Long Beach,” no page numbers, Long Beach Airport History (1) folder 2011.038.136, Nicholas J. Dallas Collection, Box 1, 2011.038-2011.038.142, Historical Society of Long Beach.

Beach Airport or simply LGB, its airport code assigned by the International Air Transportation Association.²⁸

After Earl Daugherty's untimely death, his wife Catherine "Kay" Hall Daugherty continued to run his businesses in aircraft maintenance, the flying school and a Swift Airplane dealership. She carried on his legacy and continued to be an important contributor in her own right to the evolution of the aviation industry in Long Beach. She was, as one example, a member of the local Civil Air Patrol (CAP) and she rose to be a CAP lieutenant and executive officer. CAP duties included searching for lost airplanes, air mail service and transporting civilian officials and injured persons.²⁹

In the early days of the Long Beach Airport operations, the "big three" who offered services were Earl Daugherty, Alva Roy "Al" Ebrite, and Ray Carpenter. Known like Daugherty as a very skilled flyer in his day, Ebrite (1890-1960) migrated from Colorado to California with his parents and siblings. He claimed the distinction of holding the first pilot's license west of the Mississippi and he came to Long Beach to join Daugherty in aviation activities, including stunt flying at the new airport. From 1924-1933, Ebrite taught students, flew passengers on weekends and did parachute jumps. It was recalled by one of his contemporaries, Ebrite had

²⁸ Burnett, 2011, 87-91, 102; "City Solons Accept Bid on Airfield," *Long Beach Press Telegram*, Evening Edition, July 16, 1920, 1; "Long Beach Aviation History," Long Beach.gov, acc. Aug. 16, 2023, <https://www.longbeach.gov/lgb/about-us/airport-history/>; For more information on the Long Beach Airport land acquisition and annexation, see the historical city's files at the Historical Society of Long Beach and the City of Long Beach Annexations map produced by the Dept. of Public Works, Los Angeles County, acc. Sept. 22, 2023, https://pw.lacounty.gov/sur/nas/SMPM_AnnexationCityPDFs/Long_Beach.pdf; Airport codes were first established in the 1930s, Jim Scott, "Three is the magic number: How are airport codes chosen?," *Airport World* magazine, acc. Oct. 25, 2023, <https://airport-world.com/three-is-the-magic-number-how-are-airport-codes-chosen/>.

²⁹ Burnett, 2011, 103-104; "Long Beach Airport Historic Photograph Exhibition," Presented by Michele B. Campion, Create an Image, 2005, Long Beach Airport Archives; Gerrie Schipske, *Early Aviation in Long Beach*, Images of American Series (Charleston, SC: Arcadia Publishing, 2009), 113.

the first civilian parachute jumping and wing walking training school in the country and that many of his graduates joined circuses and did stunts for films. Before getting the aviation bug, Ebrite had worked in the motion picture business as a props manager, an assistant director and an actor. He recalled years later that stunts he learned in his film days helped him later in his barnstorming activities. Ebrite was one of the pilots in the convoy of Army and Navy planes that escorted Charles Lindbergh on his cross country celebration of his 1927 first, trans-Atlantic flight to Paris, France.³⁰

As a licensed real estate broker, Ebrite — sometimes from the air — showed clients aerial views of particular land parcels that he had for sale. He also built and sold airplanes as early as 1917 in Long Beach and later pioneered some of the early commercial airline routes. From 1929-1930, he worked for pioneering Western Air Express as a pilot on flights between El Paso and Dallas carrying passengers in a Fokker Trimotor, and he also flew a Fokker F-32, four engine airplane that carried thirty-two passengers. Ebrite taught pilots to fly in both world wars. In World War I he was a flight instructor for military pilots in San Diego at North Island and March Field in Riverside. Ebrite was chief pilot in charge of flight instruction at Cal-Aero Academy under a U.S. Air Force contract in Ontario, California during World War II, where he had five-hundred graduates every three months. After 1945 he went into semi-retirement,

³⁰ “Alva Roy Ebrite,” Davis-Monthan Aviation Field Register website, acc. Sept. 24, 2023, https://dmairfield.org/people/ebrite_ar/index.html; “Monday March 17, 1958, Al Ebrite,” no page numbers, Ebrite, A.R. folder 2011.038.120, Nicholas J. Dallas Collection, Box 1, 2011.038-2011.038.142, Historical Society of Long Beach; “Chapter 5, The Big Three’,” no page numbers, Long Beach Airport History (1) folder 2011.038.136, Nicholas J. Dallas Collection, Box 1, 2011.038-2011.038.142, Historical Society of Long Beach.

flying for pleasure rather to support himself and lived the remainder of his days with his wife Ruby in the City of Orange, California.³¹

A final third of the “big three,” Ray Carpenter, started out wing walking on airplanes Daugherty was flying. It was said by one of his contemporaries, Carpenter was a self-effacing man who was not so much interested in the limelight — although his air acrobatics, racing, passenger transport, and other flights did get some mentions in Long Beach newspapers, particularly in the 1920s. Carpenter had a very successful flight training school where he prepared many aviators. A short time before World War II began, Carpenter died when his airplane crashed along the Pacific Ocean coastline. He was on his way to San Diego from Long Beach Airport. Carpenter’s airplane wreckage was found in surf off Oceanside, but his body was never recovered.

The 1920s were a time of tremendous growth in Long Beach, as well as in Southern California generally. Long Beach residents benefited from oil being found (especially in the nearby Signal Hill area) that produced new employment and refinery facilities in this industry as well as new housing and commercial building construction in the city and the region. Improved harbor infrastructure and road construction allowed for other new industries and expanded worldwide ocean cargo shipping to develop. Ford Motor Company, Procter & Gamble, a copper refinery and a vegetable oil maker opened manufacturing plants by 1930. The industrial sector in canning, packing, and manufacturing grew in the Long Beach Harbor established in 1907. The

³¹ “Monday March 17, 1958, Al Ebrite,” no page numbers, Ebrite, A.R. folder 2011.038.120, Nicholas J. Dallas Collection, Box 1, 2011.038-2011.038.142, Historical Society of Long Beach; “Chapter 5, The Big Three’,” no page numbers, Long Beach Airport History (1) folder 2011.038.136, Nicholas J. Dallas Collection, Box 1, 2011.038-2011.038.142, Historical Society of Long Beach.

U.S. Navy made its home in the San Pedro Bay Port Complex by 1919 as the area was secure and easily accessible. Long Beach warship building for the U.S. government increased, as well as civilian commercial shipbuilding. Growing interest in flying by the general public expanded private aviation simultaneously with the development of the new enlarged Long Beach Airport. New hangers and office buildings that were constructed also brought U.S. Army and Navy air operations between 1928–1930 to the airport. A beacon and field lights were installed for flyers to able to make nighttime airplane landings in 1928, making Long Beach Airport the first illuminated airfield in the nation. By 1936 two more runways were constructed and U.S. Civil Aeronautics Authority built a control tower to direct airplane traffic.³²

³² “City of Long Beach Historic Context Statement,” Prepared by Sapphos Environmental, Inc., July 10, 2009, 48, 76-77, 81, 150, 159; Aviator Charles A. Lindbergh who had made the first solo non-stop flight over the Atlantic Ocean, used the field lights on a surprise, unannounced 2.00 AM visit to Long Beach on May 31, 1928 when he could not find Los Angeles Airport. This was one of several unannounced appearances Lindbergh would make in Long Beach, Burnett, 2011, 99, 108.



Fig 19. U.S. Army airplanes lined up on the beach. The beach of the City of Long Beach near downtown served as the original airfield before the 1920s.

Long Beach Airport Archives



Fig. 20. Earl Daugherty at the Long Beach site of his first aviation field where he began his successful flight training school and airplane operations at the Chateau Thierry Tract at Bixby Road and Long Beach Boulevard, named for where Americans fought their greatest battle in France during World War I, ca. 1919.

Long Beach Airport Archives



Fig. 21. Earl Daugherty standing next his airplane on the Chateau Thierry airfield site after it had been sold to the Long Beach school district. He would move his aviation training school and airplane operations to Long Beach Boulevard and Willow Street in 1920, which became Daugherty-Municipal Aviation Field, a public private partnership that was one of the first municipal airfields in the American West open to all visiting aviators.

Long Beach Airport Archives



Fi. 22. Catherine “Kay” Hall (second from the right) marries Earl Daugherty (second from the left) who was the first pilot to marry while flying an airplane, September 7, 1923. The airplane was a wood-and-fabric Orenco Tourister designed by the Ordnance Engineering Corporation and produced by Curtiss Aeroplane and Motor Company. Their marriage ceremony was performed by First Congregational Church minister, the Reverend Henry K. Booth, while all were flying 2,000 feet over the Long Beach shoreline. The couple’s parents, (Daugherty’s parents and Kay’s mother) accompanied them. Kay would also be an important contributor to the evolution of the aviation industry in Long Beach.

Long Beach Airport Archives



Fig. 23. An early aerial view of the Long Beach Airport showing the commercial hangars of Earl Daugherty, Al Ebrite and Frank Carpenter, called the “Big Three” by some due to their importance as pioneering Long Beach aviators and aviation entrepreneurs, ca. 1925. The photograph shows a typical Sunday afternoon open house at the airport with visitors to the airfield and hangars.

Image: 2011.038.397, Long Beach Airport Pre-War folder, Nicolas J. Dallas Collection, Box 1, 2011.038.100–2011.038.142
Historical Society of Long Beach



Fig. 24. This photo was made when General Billy Mitchell, a prominent aviation advocate visited Long Beach Airport to confer with the leading aviation entrepreneurs about their business and the burgeoning industry, ca. 1925-1926. Left to right: John Montijo, Squire DuRee, Al Ebrite, General Mitchell, and Earl Daugherty. In 1922 Montijo and Anita "Neta" Snook gave Amelia Earhart flying lessons in a Kinner Airster two-place biplane with a three-cylinder, 60-horsepower, air cooled engine at Kinner Field at Long Beach Boulevard and Tweedy Road in what is today Lakewood, CA.

Image: 2011.038.398, Long Beach Airport Pre-War folder, Nicolas J. Dallas Collection, Box 1, 2011.038.100–2011.038.142
 Historical Society of Long Beach



Fig. 25. An early view of the Long Beach Airport showing the hangars of Earl Daugherty, Al Ebrite, Frank Carpenter, and others where the Signal Hill oil wells are visible in the background, ca. 1925. The 1920s was a time of tremendous growth in Long Beach, as well as in Southern California generally. Long Beach residents benefited from oil being found (especially in the nearby Signal Hill area) that produced new employment in oil refinery facilities and other regional industries.

Image: 2011.038.405, Long Beach Airport Pre-War folder, Nicolas J. Dallas Collection, Box 1, 2011.038.100–2011.038.142

Historical Society of Long Beach

While Long Beach was developing its initial public airfield infrastructure, Bessie Coleman (b. 1892) was becoming the first African American and Indigenous woman to earn her international pilot's license in France in 1921 from the Fédération Aéronautique Internationale. "Queen Bess" as she was nicknamed, would take up the life of a barnstormer, performing air stunts and competing in air meets around the U.S. She completed a very successful exhibition at Checkerboard Field in Chicago on October 15, 1922. After the publicity from the event died down, Coleman made her first trip to California in 1923 at thirty-one years old. She thought Los Angeles would be a great place to pursue her dream of opening a flight training school as she understood that this city and its surrounding areas were becoming a center of the nation's new aviation and movie industries.³³

On her way to Los Angeles, Coleman stopped in Oakland, California to set up a deal with the Coast Tire and Rubber Company. She did a sponsorship deal where she would put the company logo on the underside of the wings and the rudder of the airplanes she flew. Cal Rodgers with his Amour Company Vin Fiz soda deal (described earlier in this essay) and other White pilots had similar deals, but Coleman was the first Black pilot to negotiate such an agreement with a major corporation.³⁴

One of twelve children born to a family in Texas, at twenty-three years-old, Coleman had migrated to Chicago, Illinois where her older brother lived. She was interested in moving to Los Angeles as it was an important and growing center for the African American population in

³³ Hart, "Photo Essay - Early African American Aviators"; Philip S. Hart, *Up in the Air: The Story of Bessie Coleman* (Minneapolis, MN, Lerner Publications Company, 1996), 49-51; Von Hardesty, *Black Wings: Courageous Stories of African Americans in Aviation and Space History* (Washington, D. C., Collins/NASM, 2008) 10-15.

³⁴ Doris L. Rich, *Queen Bess: Daredevil Aviator* (Washington, D.C, Smithsonian Institution Press, 1993) 63-64, 65; Philip S. Hart, *Bessie Coleman* (Minneapolis, MN, Lerner Publications Company, 2005), 71-72, 74.

the West with Central Avenue as its hub. This evolving community was made up of mainly migrants from the American South as Black people moved to cities in the Midwest like Chicago and Detroit and Los Angeles in the West seeking economic opportunities and an escape from Jim Crow racist restrictions and discrimination. In her flight training school at the center of the blossoming aviation industry in California, Coleman hoped to help African Americans with dreams of being aviators not to experience some of the difficulties she had in becoming a pilot. Though the color of her skin hindered her from getting flying lessons in the U.S., Coleman's skin color was now a novelty that would attract large crowds to see her do death defying feats in the air. As a barnstormer, Coleman could financial sustain herself and she could make money to fund her school.³⁵

She purchased a used Curtiss JN-4 "Jenny" airplane for \$400 with money from her Coast Tire sponsorship deal. Many Curtiss Jennies had been produced as training airplanes during World War I. After the war pilots could purchase inexpensive surplus airplanes that were no longer needed for military purposes. Once her newly purchased airplane was ready, she attempted to set up an exhibition flight at Rogers Field near Wilshire Boulevard and Fairfax Avenue in Los Angeles. Rogers Field is where famed aviator Amelia Earhart took her first plane ride in 1920 — after being inspired by an air show she watched in Long Beach. Coleman's backers fell out at the last moment, including possible support from Coast Tire. She spent the next few weeks seeking backers for an exhibition. She succeeded in finding enough support to schedule another exhibition to take place on February 4, 1923, at Palomar Park near Slauson

³⁵ Kathleen L. Brooks-Pazmany, *United States Women in Aviation, 1919-1929* (Washington, DC: Smithsonian Institution Press, 1983), 9.

Avenue and La Cienega Boulevard in Los Angeles. With the positive publicity she received in the Black press since her arrival in Los Angeles, a large crowd of mostly Black community members gathered at the park to see Coleman fly.³⁶

Coleman took off for Palomar Park from nearby Santa Monica, where she stored and maintained her airplane. As she practiced her air show plan, Coleman's airplane stalled at three-hundred feet above the ground and she crashed to ground despite her attempting to pull the airplane out of the dive. This was her first crash. Coleman was transported to Saint Catherine's Hospital in Santa Monica where it was discovered she had a broken leg and several fractured ribs. In May 1923 Coleman finally hobbled out of the hospital on crutches. For the rest of the month she stayed at a friend's house in Los Angeles. She gave a few lectures and showed films of her earlier flights. By June, Coleman was ready to head back to Chicago.³⁷

Meanwhile in Long Beach, also in 1923, the first skywriting airplane was thrilling thousands with huge letters traced across the sky in a publicity stunt. By 1924 the new Long Beach Airport location at Cherry Avenue and Spring Street was dedicated, becoming the first fully, municipally-owned airport in California and the Western U.S. That same year Douglas Aircraft Company built four *World Cruiser* airplanes — named for the cities Seattle, Chicago,

³⁶ "Other Race Appreciates Girl Flyer," *California Eagle*, March 4, 1923, 1; Wendell P. Gladden, Jr., ed., "Only Colored Aviatrix in the World a Los Angeles Visitor," Feature Section, *California Eagle*, January 27, 1923, no page number; Bessie Coleman Feb. 2 lecture at Wesley Chapel advertisement, *California Eagle*, January 27, 1923, 8; "Free Air Shows," *Los Angeles Evening Herald*, Feb. 17, 1923, 8; Female Flyer Has A Record," *Los Angeles Times*, Jan. 28, 1923, P. VI, 5; Hart, *Bessie Coleman*, 2005, 74.

³⁷ Dora L. Mitchell, "Flies All Over Europe...Fall Laid to Defective Plane," *California Eagle*, Feb. 10 1923, 1; "Bessie Coleman, Girl Flyer, Meets with Serious Accident," *California Eagle*, Feb. 10, 1923, 2; "'Tell them I'm Going to Fly,' Bessie Coleman's Message to the General Public," *California Eagle*, Feb. 10 1923, 13; "Bessie Coleman Famous Aviatrix will be Seen in Person and in movies in Y.M.C.A. Benefit," *California Eagle*, May 5, 1923, 5; Hart, *Bessie Coleman*, 2005, 76-77; Rich, 68-69.

Boston, and New Orleans — which flew from Santa Monica to Seattle, Washington the official starting place of the first successful round-the-world flight. The Douglas' airplane accomplishment of this round-the-world flight helped to set the foundation for the company to become one of the leading aircraft manufacturers for the U.S. armed forces and civil airline companies in the twentieth century, which would also transform Long Beach.³⁸

At the same time Bessie Coleman was in California another African American aviator was making a name for himself. Joel "Ace" Foreman, one of Coleman's students in Los Angeles, was doing stunts in his airplane and captivating crowds with his expertise. Foreman as a boy had moved with his family to Los Angeles from Galveston, Texas. The *California Eagle* reported in September 1925, that Foreman, who had a background as a race car driver, piloted his airplane to two-thousand feet, did a nosedive and looped the loop before standing on the wings doing a series of stunts. This twenty year-old pilot gained the attention of the Black press and with the aviation community in Southern California.³⁹

Meanwhile in Iowa, where Earl Daugherty's family had lived before relocating to Long Beach in 1902, James Herman Banning was attending Iowa State College as an electrical engineering student having arrived in Ames, Iowa from Oklahoma in 1919. That was the same year that a thirty-two year-old Daugherty opened his flight training school. By 1919 Iowa had

³⁸ Claudine Burnett and Sharon Diggs-Jackson, "*Long Beach Aviation Legends*," Long Beach Airport publication, Rev. 2014, no page numbers; Burnett, 2011, 90; Douglas J. Ingells, *The McDonnell Douglas Story* (Fallbrook, CA: Aero Publishers, Inc., 1979), 23-26; Bill Yenne, *The Story of the Boeing Company, Revised & Updated Edition* (St. Paul, MN: Zenith Press, 2005), 28-29; "City of Long Beach Historic Context Statement," July 10, 2009, 87. Santa Monica purchased the airfield area used as early as 1917, that had been known as Clover Field in 1926 to turn it into a municipal airport, Nathan Masters, "Before Santa Monica Airport, There Was Clover Field," KCET.org, March 27, 2018, acc. Sept. 11, 2023, <https://www.kcet.org/shows/lost-la/before-santa-monica-airport-there-was-clover-field>.

³⁹ Rich, 70-72; Hart, *Bessie Coleman*, 80-82; C.A.B. (Charlotta A. Bass), "First To Try To Cross Continent Flight Drowns," *California Eagle*, Aug. 9, 1929, 1.

become a hot bed of aviation activity according to historian Anne Holtgren Pellegrino. While attending college Banning continued working as an automobile mechanic and had set up a shop in his parent's garage on West Second Street. Banning found Ames to be a receptive community for a young Black man like him and did business with Black and White customers in his repair shop.⁴⁰

In the spring of 1920 Banning took his first airplane ride with Stanley M. Doyle, a former World War I combat airplane pilot who had come to Ames to fly performances in an air circus. After paying \$5, Banning hopped into Doyle's Canuck biplane, and the two men took off for the blue sky. The forty-five minute ride over the Iowa countryside was a thrill for Banning.

Banning's auto repair business continued to grow. It was so successful that he decided to leave school. He formally opened J.H. Banning's Auto Repair on West Second Street in Ames in 1921. As 1923 drew to a close, Banning figured out he wanted to be an aviator. He had never seen a Black pilot, but he had read about both Eugene Bullard and Bessie Coleman in the *Chicago Defender* and the *Pittsburgh Courier* newspapers, African American owned publications. Understanding that both Bullard and Coleman had gotten their flight training in France, Banning set out to find a flight school that would accept him as a student. While he was unsuccessful in finding this school, he was able to persuade a World War I veteran, Lieutenant Raymond C. Fisher, to teach him to fly in Des Moines. That winter — between blizzards — Banning would travel to snowy roads from Ames to Des Moines for flight training in an old Hummingbird biplane. Banning purchased this Iowa-made airplane with money he saved from

⁴⁰ Ann Holtgren Pellegrino, *Iowa Takes to the Air: Volume Two 1919-1941* (Story City, IA: Aerodrome Press, 1986), 72-73, 216, 260; Hart, *Flying Free: America's First Black Aviators*, 1992, 72.

his auto repair business and he named it “Miss Ames.” When the U.S. Department of Commerce began licensing pilots in 1926, Banning became the first African American airplane pilot to earn a U.S. Federal Airline Transportation License (Number 1324).⁴¹

After recuperating in Chicago, Bessie Coleman began a tour of the country doing air shows and lectures. She began this tour in the South wishing to bring her skills and message of aviation to the part of the country that she hailed from. In Jacksonville, Florida on April 30, 1926 where she was prepping for an air show the next day, Coleman’s airplane crashed killing her and her co-pilot and mechanic William Wills, a White man. Wills was piloting the airplane. Coleman was scanning the ground below, and fell out when the engine malfunctioned and she was not wearing a seat belt. Although her aviation career was cut short, the legacy of “Queen Bess” has continued to inspire many to pursue aviation through the establishment of aviation clubs and the many tributes that celebrate her accomplishments and contributions, including: the 2023 Bessie Coleman Quarter, the sixth coin in the American Women Quarters program; the Bessie Coleman Barbie, part of Mattel’s “Inspiring Women” series released in 2023; and the 1995 U.S. postal stamp issued in her honor.⁴²

Just as Banning was earning his pilot’s license in 1926, Coleman died in a plane crash just five years after earning her license in France. Coleman, the inspiration for both Banning and Foreman was gone, eulogized at a church in Chicago with thousands in attendance with words

⁴¹ William J. Powell, *Black Wings* (Los Angeles, CA: Ivan Deach, Jr., 1934), 148.

⁴² Rich, 110-112; Hart, *Bessie Coleman*, 2005, 95-97; “Bessie Coleman Quarter,” U.S. Mint, acc. Sept. 28, 2023, <https://www.usmint.gov/coins/coin-medal-programs/american-women-quarters/bessie-coleman>; “Aviatrix Bessie Coleman is Barbie’s New Commemorative Doll,” *Ebony* magazine, January 26, 2023, acc. Sept. 28, 2023, <https://www.ebony.com/bessie-coleman-commemorative-barbie-doll/>; Leah Asmelash, “Bessie Coleman, pioneering pilot, now has her own Barbie,” CNN Style, Jan. 25, 2023, acc. Sept. 30, 2023, <https://www.cnn.com/style/article/bessie-coleman-barbie-doll-cec/index.html>.

from National Association for the Advancement of Colored People (NAACP) co-founder Ida B. Wells. In 1926 the Norman Production Company in Jacksonville, Florida released the silent movie *The Flying Ace*, a romantic melodrama with three Black pilots, one being a woman whose character was based on Coleman.⁴³

In late February of 1927 the *Pittsburgh Courier* announced that Ace Foreman would be attempting a transcontinental flight. According to the *Courier* this feat would launch “a new epoch...in the history of the Negro’s achievements.” In their description of Foreman, the *Courier* stated that this airplane pilot of considerable skill and showmanship was poised to take Coleman’s place as the face of Black aviation. However, Foreman and his mechanic Artis Ward barely managed to reach Chicago with a second-hand airplane they had just secured for this flight. Foreman, like Coleman, was interested in forming a flight school so that others like them could learn how to fly an airplane. With this objective in mind in 1927 Foreman founded a flight school in Los Angeles with the goal of spreading the gospel of aviation to the African American community.⁴⁴

⁴³ “Film Possibility,” *The Afro-American* (Baltimore), May 11, 1923, 1; Rich, 99-101; Hart, *Bessie Coleman*, 2005, 90; Elizabeth Amelia Hadley-Freyberg, *Bessie Coleman: The Brownskin Lady Bird*, (New York, NY: Garland Publishing Company), 1994, 14, 127-133.

⁴⁴ Jan Benes, “Black Empire of the Air: Black Aviation in the Harlem Renaissance and George S. Schuyler Serialized Fiction” (PhD diss, Masaryk University, 2018), (*Pittsburg Courier* as quoted) 49, 50-51.



Fig. 26. Bessie Coleman, Curtiss Field, Long Island, NY. 1922. Bessie “Queen Bess” Coleman earned her pilot’s license in France in 1921 to become the first Black and Indigenous woman with a pilot’s license. In the 1920s she visited California several times as a barnstormer participating in several air meets. Queen Bess, as she was affectionally nicknamed, had a California Dream to open a flight training school in Los Angeles as she thought there were many African Americans who were migrating to the region with adventurer spirits and the resources to get in on the ground floor of the various aspects of aviation and related industries.

Image: 00077729, <https://tessa2.lapl.org/digital/collection/photos/id/110829/rec/113>
Digital Collection of Los Angeles Public Library



Fig. 27. The first terminal building of the Long Beach-Daugherty Field, which is called now the Long Beach Airport, at Cherry Avenue and Spring Street, ca. 1930s. The Long Beach Airport is one of the first municipally owned airfields of California and any city in the Western U.S. A new three-story administration building with a tower would be constructed in 1941.

Long Beach Airport Archives

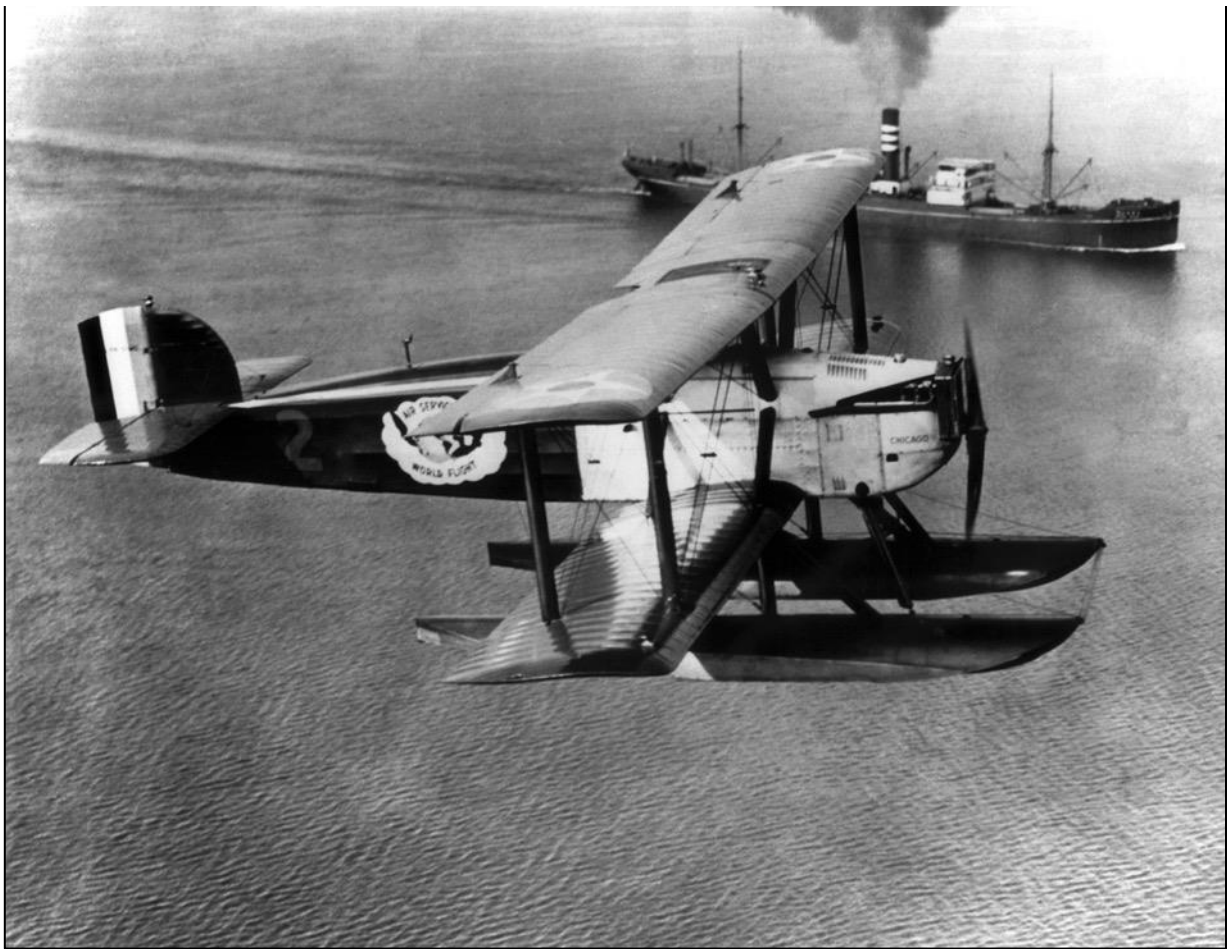


Fig. 28. The “Chicago” named for the city in Illinois, was one of four Douglas Aircraft Company 1924 World Cruisers featuring pontoons or floats and it made the first successful round-the-world flight. This airplane’s technology and accomplishment helped to set the foundation for the company to become one of the leading aircraft manufacturers for the U.S. armed forces and for commercial airline companies.

Long Beach Airport Archives



Fig. 29. Early Long Beach flyers who look happy to have their time of adventure in the air, ca. 1920s-1930s.

Image: Folder 2011.038.235.285, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
Historical Society of Long Beach

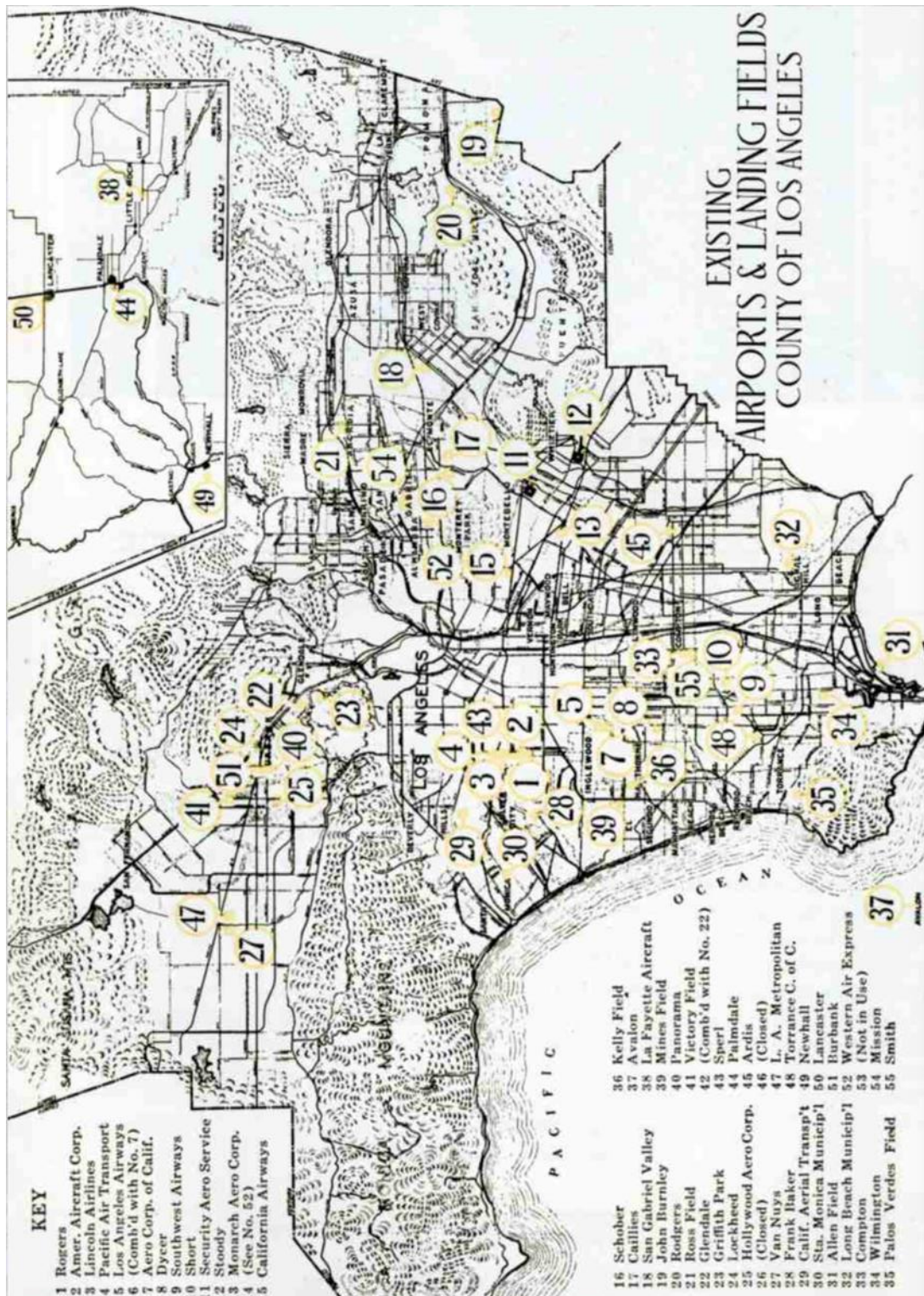


Fig. 30. 1928 Map of Southern California Airfields. Abandoned & Little-Known Airfields, Paul Freeman, acc, Aug. 27, 2023, <http://www.airfields-freeman.com/index.htm>

By 1929 when William J. Powell recruited Banning to be the chief pilot for the Bessie Coleman Aero Club in Los Angeles, Banning was the most experienced African American pilot in the country. He was a seasoned stunt pilot with significant flying time to his credit. This experience as a pilot qualified him to not only carry passengers, but also to fly mail and other cargo. Powell and his aero club co-founder Irwin Wells opened their flight school with more fanfare than did Foreman punctuated by naming it after Coleman. The Bessie Coleman Aero Club office was located at 1423 W. Jefferson Boulevard and held classes at Jefferson High School. The flying portion of this education operated at Los Angeles Eastside Airfield in Montebello. Unfortunately, Foreman drowned in the surf after a mishap on a boat near Los Angeles Harbor in 1929 thus ending his personal quest to train Black pilots.⁴⁵

William J. Powell (1897-1942) was a World War I veteran whose family migrated to Chicago from Henderson, Kentucky when he was eight years old. On the last day of his tour of duty in Europe, Powell's unit of Black troops were ordered to the front lines where he was wounded in a poisonous gas attack. He came back to the U.S. to recover and finished up an engineering degree at the University of Illinois. After graduating from college and in somewhat better health, he opened four gasoline stations and a large garage that did automobile repairs in Chicago. In 1926 Powell traveled to France for an American Legion convention. In Paris, at Le Bourget Airfield, Powell along with his church pastor, took his first exhilarating ride in an airplane.⁴⁶

⁴⁵ "Ace Foreman Lived an Eventful Life: Death was Sad, Tragic End," *Pittsburgh Courier*, Aug. 17, 1929, 2; C.A.B. (Bass), *California Eagle*, Aug. 9, 1929, 1.

⁴⁶ Hart, *Flying Free: America's First Black Aviators*, 1992, 23; Powell, *Black Wings*, 1-3.

Upon returning to Chicago, Powell tried to find a flight school that would accept him. After much difficulty, he found a school in Los Angeles that he could attend. He sold his businesses in Chicago and moved to Los Angeles in 1928. It was after learning to fly that Powell began putting in place his dream to organize an all-Black flight school in honor of Bessie Coleman. He recognized that aviation was a new technology with the potential to change society. He wanted Black Americans to enter this new field on the ground floor — to become airplane pilots, mechanics, flight school owners, and airplane designers.⁴⁷

In 1928, the same year Powell was moving to Los Angeles, Lloyd O'Donnell and his wife Gladys Livingston Berry O'Donnell opened the O'Donnell School of Aviation at the Long Beach municipal airfield. She was the only woman participant in the 1927 Transcontinental Air Race from New York to Spokane, Washington riding as her husband's passenger. Under the tutelage of her husband and also German aviator Bernard Lauscher, O'Donnell became a notable woman aviator based in Long Beach. Her inspiration to become a pilot was urged on by Charles Lindbergh's trans-Atlantic Ocean flight, when he completed the 1927 longest, first solo non-stop flight from New York City to Paris in "The Spirit of St. Louis" aircraft.⁴⁸

She received her pilot's license at age twenty-five in 1929 and immediately entered the \$25,000 National Woman's Air Derby, a race from Santa Monica, California to Cleveland, Ohio. There were nineteen contestants, including Amelia Earhart and Pancho Barnes. O'Donnell finished in second place ahead of Earhart after spending nine days in the air flying her "Miss Long Beach" airplane. O'Donnell won the 1930 Women's Air Derby from Long Beach to Chicago,

⁴⁷ Hart, "Photo Essay - Early African American Aviators."

⁴⁸ Burnett and Diggs-Jackson, undated, no page numbers; Burnett, 2011, 131-134.

Illinois. She became known as “The Flying Housewife,” and she continued to compete in women’s specific races, which were sometimes called a nickname by the press, the “Powder Puff Derbies,” as well as in coed races. Bringing national aviation attention in the 1930-1970s, some of these transcontinental, attitude, endurance, and other competitions would be held or started in Long Beach with several of the city’s women pilots participating. In addition to O’Donnell, there was Fran Bera, Claire McMillen, Shirley Blocki, Martha Baechle, and Marcella Duke. Due to Bera’s race winning and World War II ferrying pilot Barbara Erickson London’s expertise and lobbying, Long Beach became the headquarters of the All-Woman Transcontinental Air Race (still sometimes referred to as the Powder Puff Derbies) from 1950s to 1970s for twenty-five years. Gladys O’Donnell would go on to train thousands of airplane pilots during World War II, served as Long Beach Aviation Committee chair and later become an important figure in the National Federation of Republican Women and the Republican Party.⁴⁹

O’Donnell first met Amelia Earhart on September 14, 1928, when Long Beach paid tribute to a group of aviation pioneers at a banquet at the Breakers Hotel. In attendance was the largest group of aviation notables ever assembled according to the *Press Telegram* newspaper. Earhart had attended her first air show at Daugherty’s airfield in December 1920 which included the first all-female air race ever held over Southern California and featured aviators Aloysia McLintic and Anita “Neta” Snook. Earhart was inspired to take to the sky and pushed her father Edwin to find out more about learning to fly. Her father then took her to Rogers Field near Fairfax Avenue and Wilshire Boulevard and paid \$10 for her to take her first

⁴⁹ Burnett, 2011, 131-134, 137-142; Schipske, 2009, 111; For more the early lives of the O’Donnell’s in Texas see, Lorraine O’Donnell Doyle, *Second to None: The Story of Lloyd & Gladys O’Donnell and the 1929 Women’s Air Derby* (Rancho Santa Fe, CA: Lorraine O’Donnell Doyle, 2001).

flight with Long Beach pilot Frank Hawks. A local resident since his childhood and graduate of Poly High School, Hawk was regarded by the end of his life as one of the greatest pilots in the U.S. Like Earl Daugherty, he and his family were also Iowa transplants to Long Beach. Earhart then caught the flying bug and was hooked. She took a job at age twenty-three as a telephone company clerk to pay for flying instruction with Neta Snook and then with Long Beach pilot John Montijo.⁵⁰

Under the tutelage of Snook and Montijo, Amelia Earhart earned her airplane pilot's license on May 16, 1923, two years after Bessie Coleman earned her license in France. Earhart would go on to become the most famous female aviator of her time while Coleman's exploits up to her untimely death in 1926 were primarily only covered by the Black press such as, the *Chicago Defender*, *Pittsburgh Courier*, and *California Eagle*. Earhart had Iowa roots just as did Earl Daugherty and James Herman Banning. Though born in Atchinson, Kansas in 1907, she lived in Des Moines when her father transferred there for his job with the Rock Island Railroad. It was at the Iowa State Fair in Des Moines where she saw her first airplane at age ten. Her first instructor, Neta Snook, also hailed from Iowa and was likely the first woman flight instructor. Snook was one of the first women test pilots for airplane manufacturer Donald Douglas and the first woman facility's operations manager for a commercial airfield at Kinner Field Airport in present day Lynwood, where she met Earhart. Snook was inducted into the 1992 Iowa Aviation Hall of Fame.⁵¹

⁵⁰ Burnett, 2011, 85, 117, 120.

⁵¹ Pellegreno, 110-112; Shalyn Marchetti, "Neta Snook: Amelia Earhart's Instructor and One of the First Female Test Pilots," *Plane & Pilot Magazine*, Updated October 19, 2022, acc. Aug. 23, 2023, <https://www.planeandpilotmag.com/news/pilot-talk/neta-snook-amelia-earharts-instructor-and-one-of-the-first->

By 1930 Long Beach had five of the fifty-two women pilots licensed to fly in California. In addition to O'Donnell, these flying women included Virginia Blume, Edna M. Coulter, Mary Billy Quinn, and La Bella Sweeley. Jessie McWhinney, a mother of four children, would have been a sixth Long Beach licensed women pilot had she not been killed in an aviation accident in April 1929. More than one-fourth of the two-hundred American women licensed to fly were in California. At the time the *Los Angeles Times* editor and writer saw this as newsworthy, and all the California woman pilots were identified by name in the newspaper. There were several related articles published in a section of the newspaper titled "Aviation," which had big lettering across the top with a blimp and a monoplane on the left and right of the title, respectively. The number of California women flyers being identified by place and name and the largest newspaper in the region, which featured an aviation section was an indication of aviation's gaining importance in the Southern California region at the time.⁵²

John G. "Monty" Montijo (b. 1891) grew up in Valley Springs in California's gold country. His mother's father was born in Italy, and all of his other grandparents were Mexican American. World War I gave Montijo the opportunity to learn how to fly which had been a dream of his since his youth. In 1916 he enlisted in the Army, became an aviation mechanic and learned to fly airplanes very well. Montijo was so good that the Army's Signal Corps assigned him to be a flight instructor in San Diego and he rose to the highest rank for a non-commissioned officer of Master Signal Electrician. He and Earl Daugherty met while they were

female-test-pilots/; "Women in Transportation History: Neta Snook Southern, Pilot," *TransportationHistory.org*, acc. Aug. 23, 2023, <https://transportationhistory.org/2019/03/18/women-in-transportation-history-neta-snook-southern-pilot/>; Brooks-Pazmany, 28; Burnett, 2011, 152.

⁵² Burnett, 2011, 136; "Woman Pilots Lead Here, More Than One-fourth of Feminine Holders of Licenses to Fly Live in California," *Los Angeles Times*, May 11, 1930, P-VI, 9.

in the Army working as flight instructors at March Field in Riverside. He would move his family to Long Beach in 1924. Montijo would succeed Daugherty as Municipal Aviation Commission Chairman in 1929.⁵³

Becoming a stunt pilot performer after his military service, Montijo was one of the only Mexican American aviators active in Long Beach in the 1920s and 1930s. Despite being in the minority in the aviation community at the time, Montijo stood out with his range of accomplishments. He was a barnstorming pilot which led him to a job with Samuel Goldwyn's motion picture company where he performed stunts — a few of which led to close calls, including while he was working on the 1926 silent film *Partners Again*. He taught at California Polytechnic School at San Luis Obispo, and while teaching there, he acted as a private pilot for William Randolph Hearst flying between his castle in nearby San Simeon to Los Angeles. Montijo started an aircraft manufacturing company with C.B. Bellows called Belmont Airplane Company to build a commercial cabin plane called the Glen-mount, headquartered at Long Beach Airport. Montijo was a commercial pilot for several passenger airlines including Varney Air Transport, which became United Airlines.⁵⁴

It was back to Long Beach where his body was flown after a fatal plane crash on May 1, 1935 at North Buttes, Colorado where he was dropping mail to a remote school after having flown out of the municipal airport in Pueblo, Colorado less than an hour earlier. The forty-three year old Montijo had indeed made his mark as an accomplished pilot, including his tutelage of Amelia Earhart and the inspiration instilled in his two sons the desire to become aviators.

⁵³ Burnett, 2011, 151-153.

⁵⁴ Burnett, 2011, 151-154.

Son John, Jr. known as “Jack” flew P-51 Mustangs for the 353rd Fighter Squadron in Europe during World War II and later managed La Cresta Airfield in Bakersfield, California. Son James, known as “Jim” became a flight instructor, charter airplane pilot, and a crop-duster, and also worked for a time in the Bakersfield area.⁵⁵

After the boom years of the 1920s, the Great Depression occurred after the 1929 stock market crash which had repercussions for Long Beach and Southern California just as it did in the rest of the U.S. Long Beach tourism stalled as well as other industrial growth. On top of dismal economic circumstances, in 1933 there was a 6.4-magnitude earthquake centered in Long Beach that destroyed residential, institutional and commercial buildings. The local economy would be rejuvenated in part by federal grants and loans that helped to finance reconstruction, as well as the 1936 discovery of more oil in the Wilmington Oil Field near the Long Beach Harbor and real estate development. The expansion of U.S. Army and Navy air bases at the Long Beach Airport and nearby Reeves Field on Terminal Island in the Port of Long Beach and Port of Los Angeles during the 1930s would help support the local economy. The importance of the Long Beach Airport and the military intensified as the defense industry grew over the coming decades. Long Beach officials were able to obtain federal Work Progress Administration (WPA) funding for several local construction projects, including a port breakwater and municipal airport runway expansion with new building facilities. A new

⁵⁵ Burnett, 2011, 151-154; “John Gregory Montijo,” Davis-Monthan Aviation Field Register, acc. Sept. 11, 2023, https://dmairfield.org/people/montijo_jg/index.html; Gilbert P. Gia, “La Cresta Airfield at Bakersfield, California, 1947,” acc. Sept. 11, 2023, <https://www.scribd.com/document/50410577/La-Cresta-Airfield-at-Bakersfield-California-1947>.

terminal/administration building for the municipal airport was one of the new projects covered by this WPA funding, along with the land acquisition for runway expansion.⁵⁶

⁵⁶ “City of Long Beach Historic Context Statement,” July 10, 2009, 47; Burnett, 2011, 184-187, 199.



Fig. 31. William Powell (right) and Joe Louis (second from left) at Jefferson High School in Los Angeles at an aeronautics class, ca. 1932. Powell was one of the founders of the Bessie Coleman Aero Club in Los Angeles in 1929. He was a key organizer of the first two Colored Air Circuses held at the Eastside Airport. He befriended several Black luminaries such as heavyweight boxing champion Joe Louis and bandleader Duke Ellington as sponsors of his work which helped to make Los Angeles a national hub for Black aviators.

Image: <https://airandspace.si.edu/multimedia-gallery/99-15418640jpg>
National Air and Space Museum Archives, Smithsonian Institution



Fig. 32. Gladys Livingston Berry O'Donnell, no date. Gladys, with her husband Lloyd O'Donnell opened the O'Donnell School of Aviation at the Long Beach Airport in 1928. Her inspiration to become an aviator was urged on by Charles Lindbergh's trans-Atlantic Ocean flight, when he completed the 1927 longest, first solo non-stop flight from New York City to Paris in "The Spirit of St. Louis" aircraft.

Long Beach Airport Archives



Fig. 33. O'Donnell School of Aviation hangar with Charles Lindbergh's aircraft, the "Spirit of St. Louis," 1927. In the celebration across the U.S. of Lindbergh's solo and longest distance transatlantic flight accomplishment, he visited Long Beach on one stop. He asked Lloyd O'Donnell to make a few repairs on the airplane in his aviation repair shop at the new Long Beach Airport at Cherry Avenue and Spring Street. Long Beach pioneering aviation entrepreneur Al Ebrite was one of the pilots in the convoy of U.S. Army and Navy airplanes which escorted Charles Lindbergh on his cross country celebration of his 1927 first, trans-Atlantic flight to Paris, France and back to the U.S.

Long Beach Airport Archives



Fig. 34. Charles Lindbergh visiting Long Beach after he completed 1927 trans-Atlantic Ocean flight. His was the longest, first solo non-stop flight from New York City to Paris in "The Spirit of St. Louis" aircraft. His success boosted attention about aviation around the world. In the future Lindbergh would make several stops in Long Beach over the years.

Image: 2011.038.246, Long Beach Airport Folder 2011.038.437.501, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
Historical Society of Long Beach



Fig. 35. The 1929 Women's Air Derby was the first official women-only air race in the U.S. taking place as part of the 1929 National Air Races which started at Clover Field in Santa Monica, CA and finished in Cleveland, OH. Some male journalists dubbed the race the "Powder Puff Derby" and sought to diminish the race and its participants. Pilots shown in this photograph, from left to right: Edith Foltz, Margaret Perry, Mary Von Mack, Louis Thaden, Gladys O'Donnell, Mrs. Keith Miller (New Zealand), Bobby Trout, Blanche Noyes, Ruth Elder, Thea Rasch (Germany), and Phoebe Omlie. Louise Thadden won first place and Long Beach's own, Gladys O'Donnell won second place. There were twenty competitors. Eighteen were from the U.S. including but not pictured here, Florence "Pancho" Barnes from Los Angeles and Amelia Earhart, the first woman pilot to fly solo across the Atlantic Ocean. Credit Line: Underwood & Underwood.

Image: 2011.048.009
 Historical Society of Long Beach



Fig. 36. Florence "Pancho" Barnes and Amelia Earhart, ca. early 1929-1930s. These early woman pilots helped break barriers for women in aviation and American society when flying was in its infancy. Barnes and Earhart, both participated in the 1929 Women's Air Derby. Barnes did not finish the race due to a crash which she survived and Earhart placed third behind Gladys O'Donnell of Long Beach. In 1930 with her Travel Air Type R Mystery airplane at Metropolitan Airport in Van Nuys, Barnes beat Amelia Earhart's airspeed record to become the "Fastest Woman on Earth." According to her flight logs, between 1928 and 1930 Barnes often flew in and out of Long Beach Airport.

Image: PB Amelia with flowers.TIF
Pancho Barnes Trust Estate Archive



Fig. 37. Entrants of the 1931 Women's Air Derby, route Santa Monica from Clover Field to Cleveland, OH, left to right: Florence "Pancho" Lowe Barnes, Mildred Morgan, Clema Granger, Patty Willis, Gladys O'Donnell, and Mary Charles. Photo Credit Line: ACME, 8/31/31 (as in Acme New Pictures, Inc.) As the Great Depression impacted the U.S. various air races continued to take place even if not every year during the 1930s and at the same time these events began to fade away as regulation of the aviation industry began to be implemented.

Image: PB-women-flyers-1931-01.TIF
Pancho Barnes Trust Estate Archive



Fig. 38. Gladys O'Donnell (center right) celebrates with other entrants who would be flying in the 1930 Women's Air Derby which started in Long Beach and ended in Chicago. O'Donnell won this 1930 air meet. She earned second place in, the 1929, first Women's Air Derby ahead of Amelia Earhart and Florence "Pancho" Barnes. In both competitions, which were nicknamed the Powder Puff Derbies by the press, O'Donnell flew her "Miss Long Beach" airplane, a 1929 Waco Taperwing biplane. In 1930 race, O'Donnell obtained the Long Beach *Press Telegram* newspaper as a sponsor.

Long Beach Airport Archives

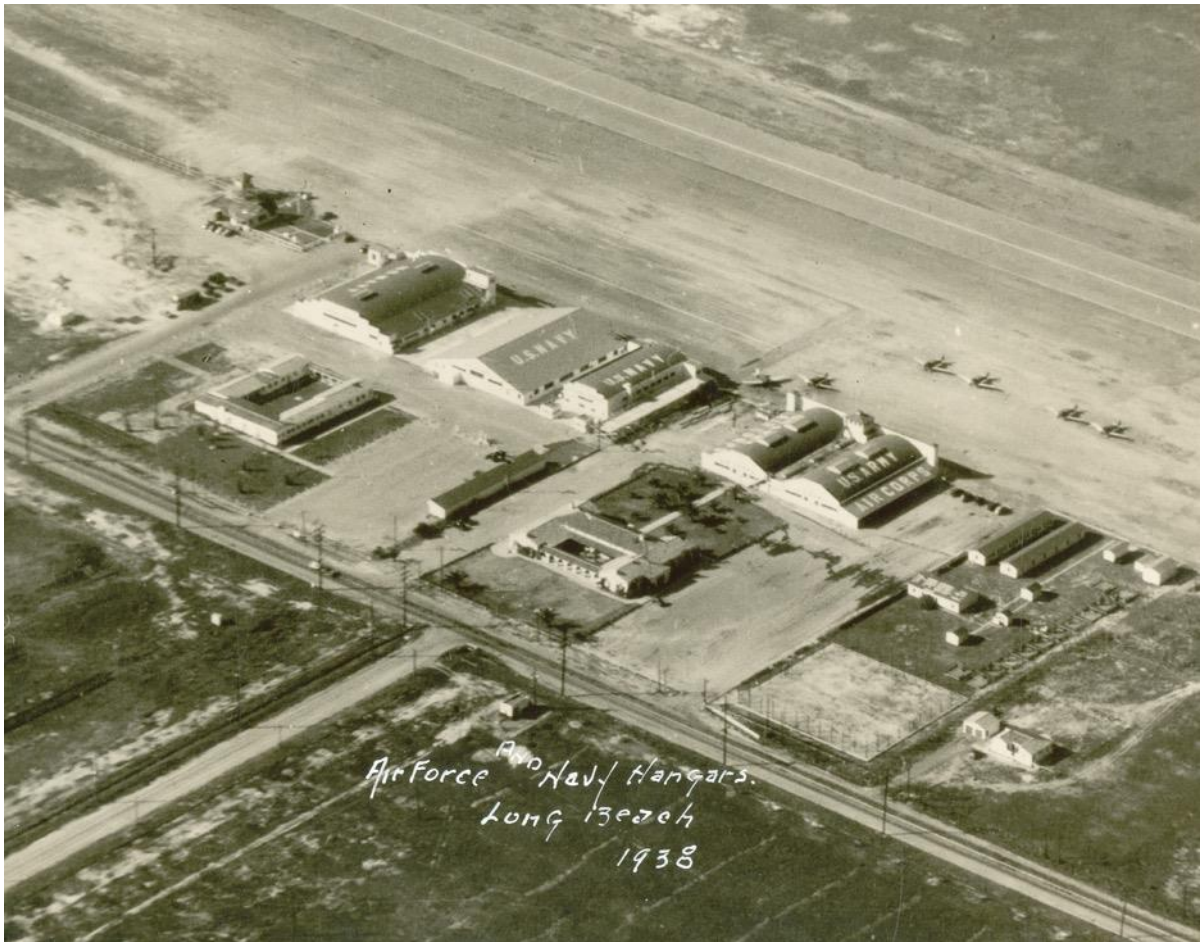


Fig. 39. Beginning in the late 1920s the City of Long Beach built hangars and facilities for the U.S. Navy (rear left) and Army Air Corps (rear right) at the municipal airport. At the same time the city pursued commercial aviation. Western and Maddux Airlines would begin carrying commercial passengers, mail, and cargo from the Long Beach Airport by 1929.

Image: 2011_038_008_11x14
Historical Society of Long Beach

In Los Angeles at the East Montebello Garden at the beginnings of the Great Depression, the second Colored Air Circus on December 6, 1931 featured Hubert Fauntleroy Julian who had come from New York City to participate with the local aviators. In addition this air show featured the debut of the Five Blackbirds, a precision flight team that included Marie Dickerson Coker. This air show benefited the City of Los Angeles Unemployment Fund at the request of Mayor John C. Porter and raised funds for not just Black Angelenos, but people of all races in the city. In a ceremony at Los Angeles City Hall the day before the air show on December 5, Mayor Porter, Los Angeles County Supervisor John R. Quinn and Los Angeles County Sheriff Eugene Discailluz welcomed the African American aviators who would be in the air show. The event marked the first time in Los Angeles history that the Mayor formally welcomed Black people on the steps of City Hall.⁵⁷

Hubert Fauntleroy Julian was born in Port of Spain, Trinidad in 1897. He caught his first glimpse of an airplane in 1911 when aviator Frank Borland performed an exhibition flight, ultimately crashing and dying. The shock of the crash stayed with the young man, who left Trinidad after World War I for Canada. In Canada Julian took his first airplane ride with flying ace Billy Bishop. Shortly after this experience Julian designed and patented what was labeled an “Aerospace Safety Device,” a modified parachute. Julian migrated from Montreal to New York City’s Harlem district in 1921. He had become a competent pilot, but a better parachutist.

⁵⁷ Philip S. Hart, *Flying Free: America’s First Black Aviators* (Minneapolis, MN: Lerner Publications Company, 1992), 27; Hardesty, *Black Wings*, 2008, 23-26, 45; “Mayor Welcomes Aviators,” Los Angeles Almanac, Dec. 6, 1931, acc. Sept. 20, 2023, <http://www.laalmanac.com/history/hi741.php>; Cecilia Rasmussen, “Early Black Pilot Found Racial Equality in the Sky,” *Los Angeles Times*, Nov. 5, 2000, acc. Sept. 20, 2023, <https://www.latimes.com/archives/la-xpm-2000-nov-05-me-47380-story.html>.

Julian was affectionally called the “Black Eagle of Harlem” and became a folk hero for many in the African diasporic world.⁵⁸

His first flight above Harlem took place in 1922 during the Universal Negro Improvement Association (UNIA) convention, which led to his appointment as the organization’s head of a new aeronautical department. His first parachute jump was in September 1922 at an air show at Curtiss Field on Long Island that featured Bessie Coleman. Julian had two parachute jumps over Harlem in 1923 that raised his profile while at the same time landing him in jail. In 1924 he began focusing more on piloting planes rather than parachuting out of them. Julian first proposed to fly to Liberia in Africa from New York with a co-pilot. Later he proposed to fly solo across the Atlantic from New York to Paris, hoping to be the first pilot to do so, before Charles Lindbergh made this historic flight in 1927. These and other similar ventures failed, but Julian became an international celebrity in the process. Julian was promoted as the featured pilot in the advertisements for the December 6, Colored Air Circus with the Five Blackbirds. Julian would continue his controversial career, in which he received more press than his Black aviation peers. He also outlived most of his fellow Black aviators as he became a prominent international arms dealer who died quietly at the Veteran’s Hospital in the Bronx on February 19, 1983.⁵⁹

⁵⁸ David Shaftel, “The Black Eagle of Harlem,” *Smithsonian Air and Space Magazine*, Dec. 2008, acc. Sept. 18, 2023, <https://www.smithsonianmag.com/air-space-magazine/the-black-eagle-of-harlem-95208344/>.

⁵⁹ Hart, “Photo Essay - Early African American Aviators”; Dickerson, Marie Coker. Aviator, entertainer and Los Angeles, CA resident. Interview by Philip S. Hart, Sept. 1983, Los Angeles, CA; “Harlem’s Colonel Hubert Fauntleroy Julian, Black Eagle Of Harlem” (video), *Harlem World*, acc. Sept. 18, 2023, <https://www.harlemworldmagazine.com/harlems-colonel-hubert-fauntleroy-julian-the-black-eagle-of-harlem-video/>; Shaftel, “The Black Eagle of Harlem,” Dec. 2008,.

Marie Dickerson Coker was born in Tulsa, Oklahoma in 1906. She moved to Los Angeles in the early 1920s to pursue a career in the Hollywood entertainment world as a piano player, singer and dancer. She proved to be quite successful and worked in Los Angeles and in Harlem at the famous Cotton Club, as well as nightclubs on the chitlin' circuit in places such as Kansas City, Missouri, Denver, Colorado, and elsewhere. While performing in Culver City, California at the Chicken Coop nightclub in 1929 she met two African American aviators who came into the club dressed in their pilot gear. Initially she thought they were working on a movie at nearby MGM Studios. They told her they were members of a flight school, the Bessie Coleman Aero Club, and their names were Willian Powell and Herman Banning. She got excited and told them she wanted to learn how to fly. She was also excited because the flight school was named after a woman. Banning was her instructor and with his mentoring she was able to solo in a short period of time. Coker became skilled at flying in formation and she was the only woman on the Five Blackbirds precision team which made its debut at the December 6, 1931 Colored Air Circus, following a successful first air show on October 31, 1931 at Eastside Airport where Banning was the featured pilot. Another Marie, a protégé of Marie Dickerson Coker, was also inspired by the legacy of Bessie Coleman. Marie Daughtry trained with the Bessie Coleman Aero Club to fly and became a skilled parachute jumper in the second Colored Air Circus.⁶⁰

There were other pilots in the Bessie Coleman Aero Club who enjoyed flying, but did not participate in the air stunt shows regularly, such as Maceo B. Sheffield who was known as the

⁶⁰ The chitlin' circuit included a variety of venues mostly managed and owned by African Americans throughout the U.S. that allowed Black musicians and other entertainers to perform during the era of Jim Crow racial segregation (1900s to 1960s). Hart, *Flying Free: America's First Black Aviators*, 1992, 27; Hardesty, *Black Wings*, 2008 45.

“flying cop” because he worked for the Los Angeles Police Department. In a 1928 *California Eagle* article, Sheffield was identified as being the only African American in the West owning his airplane. Other members of the club were mentioned including Walter Swaggerty who had been flying for eighteen years and Mrs. Geraldine “Jerry” Fordson, a successful women pilot was called out as being “ambitious to be one of the world’s greatest bird girls” in this same article. On the same page of this publication was the announcement about events at the new Hotel Somerville which became The Dunbar hotel, an important center for African Americans hostelry and social event in the mid-twentieth century. The aero club’s coverage along with Hotel Somerville activities shows the Black press was interested to make its African American readers aware of all the important contemporary developments in their community.⁶¹

The 1931 circus received rare coverage in the *Los Angeles Times*, which usually ignored events by and for people of color. The *Times* review was positive as it stated, “The Black Eagle, known in private life as Col. Hubert Julian ... and five other colored pilots kept nearly 10,000 necks craned skyward over Los Angeles Eastside Airport yesterday afternoon during the colored air circus conducted under the auspices of the Associated City Employees Fund for the Unemployed. Along with the ‘Black Eagle’ flew the ‘Five Blackbirds’ stunt squadron of colored speed aces. Stunt and parachute leaps completed an afternoon of thrills.” For texture of the era’s activities, the billboard for the Colored Air Circus which features Hubert Julian, can be seen in the background of episode three of the HBO’s *Perry Mason* (2020 first season), a

⁶¹ “Girl Flyer Heads L.A. Aero Club,” *California Eagle*, Oct. 26, 1928, 8.

historical fiction legal drama series featuring aspects of Los Angeles history as part of the storyline.⁶²

Soon after the success of the second Colored Air Circus in Los Angeles the emphasis turned to long-distance flights. Julian had announced a couple of long-distance flights that did not pan out in 1924 and 1926. Ace Foreman had flown from Los Angeles to Chicago in 1925, but could not continue on to New York City with his mechanic Artis Ward because he was unable to keep their plane airworthy. With these failures in mind Herman Banning decided that he would attempt a cross country flight sometime in 1932.⁶³

James Herman Banning and Thomas C. Allen got their airplane ready and took off from Dycer Field at 136th Street and Western Avenue in what is today Gardena, California on September 21, 1932. They dubbed themselves the Flying Hoboes as they only had \$25 in cash and a stash of Sun Maid raisins when they took off. They navigated their way across country by October 9, landing at Valley Stream Field on Long Island New York, in forty-one hours and thirty-seven minutes over twenty-one days in the air thus becoming the first African American pilots to make a transcontinental flight across the U.S. On their last leg of this historic flight from Pittsburgh, Pennsylvania to Long Island, they were recruited by Robert L. Vann, editor of the *Pittsburg Courier* to drop thousands of “Franklin Delano Roosevelt for President” flyers from

⁶² “Colored Air Circus Thrills Thousands,” *Los Angeles Times*, Dec. 7, 1931, (quote) 26; Hadley Meares, “The Colored Air Circus in ‘Perry Mason’ Was Real – And Revolutionary,” Laist.com, Aug. 12, 2020, acc. Aug. 14, 2023, <https://tinyurl.com/Laist-Meares>.

⁶³ Oral history interview with Thomas C. Allen in Washington, D.C. by Philip S. Hart, Sept. 1982.

their airplane — for which they received a fee. They were celebrated in Harlem at the Cotton Club by Cab Calloway and were photographed for the front page of the *Amsterdam News*.⁶⁴

With that help from the Democratic Party in Pittsburg, Banning and Allen made their way back to Los Angeles. Banning continued to perform in air shows in the area. Unfortunately, he was prepping for an air show in San Diego when he was killed in a plane crash on February 5, 1933. He was not piloting the aircraft which belonged to a young, White Naval airman who refused to let Banning captain the airplane. Thomas Allen eventually moved back to Oklahoma City where he worked at that city's air and space museum. He attended the opening of the "Black Wings" exhibition at the Smithsonian National Air and Space Museum in September 1982 where he joined the likes of Army Air Corps General Benjamin O. Davis (commander of the 99th Fighter Squadron at the Tuskegee Army Air Base during World War II), several surviving Tuskegee Airmen, astronaut Guy Bluford, and other aviation notables. Thomas Allen died in Oklahoma City in 1989. On June 17, 2023 the airport in Ames, Iowa was renamed after Banning and is now known as the James Herman Banning Ames Municipal Airport.⁶⁵

⁶⁴ Marc Wortman, "The First Black Airmen to fly Across America," *Smithsonian Air and Space Magazine*, January/February 2018, acc. Aug. 16, 2023, <https://www.smithsonianmag.com/air-space-magazine/banning-allen-transcontinental-flt-180967706/>; Von Hardesty, "Banning and Allen: Flying Against Prejudice" in *Great Aviators and Epic Flights* (Washington, D.C. Hugh Lauter Levin Associates, Inc.), 2002, 117-128. Other aviators and epic flight included are, the Wright Brothers, Louis Bleriot, Igor Sikorsky, Eddie Rickenbacker, Charles Lindbergh, Amy Johnson, Valery Chkalov, Peter Riedel, Richard Archbold, Chuck Yeager, and Dick Rutan and Jeanna Yeager.

⁶⁵ "Dedication Ceremony: Renaming of the James Herman Banning Ames Municipal Airport," City of Ames, acc. Aug. 24, 2023, <https://www.cityofames.org/Home/Components/Calendar/Event/10953/31#:~:text=Mayor%20John%20Haila%20and%20the,public%20is%20encouraged%20to%20attend>; Teresa Kay Albertson, "Ames dedicates airport to Black aviator pioneer in Juneteenth celebrations," *Ames Tribune*, June 12, 2023, acc. Aug. 23, 2023, <https://www.amestrib.com/story/news/local/2023/06/12/ames-airport-banning-black-james-herman-african-american-aviator-pioneer/70313688007/>; City of Ames City Council president Gloria J. Betcher, email message to co-author Philip S. Hart, regarding "City of Ames – James Herman Banning Ames Municipal Airport Dedication Ceremony Planned for June 17," June 6, 2023.

In 1935 in another part of Los Angeles County, William Powell produced and directed the mini-documentary film *Unemployment, the Negro, and Aviation* which showed his work in promoting aviation in the Black community. A year earlier in 1934, Powell published a semi-autobiographical book *Black Wings* which also promoted aviation in the Black community. More recently, the Smithsonian Press' new edition of Powell's semi-autobiography *Black Aviator* was made into a documentary film *Black Wings* that aired on the Smithsonian Channel in 2012. The Compton/Woodley Airport up the road from Long Beach was a key location for shooting this film. *Black Wings* was nominated for a 2013 NAACP Image Award for Best Documentary Feature.⁶⁶

In the 1930s the Birmingham, Alabama-born Howard "Skippy" Smith (1913-2003) began a career as a skydiver and aviator in the Los Angeles area. He followed in the paths of the likes of Hubert Julian and Marie Daughtry as skydiving parachute stunt performers. At the time the most celebrated African American skydiver was Willie "Suicide" Jones who was affiliated with the burgeoning Chicago group of Black aviators. Skippy Smith and his partner Mack "Skip" Gravelle created the "Skip and Skippy Show" — working the air show circuit around the country — leaping from airplanes and thrilling crowds as they descended to earth. When Grandville was killed while performing a skydiving stunt at an air show in 1939, Smith decided to settle in San Diego. He secured employment at Standard Parachute in San Diego as a parachute packer and

⁶⁶ This rare film footage was given to Philip Hart by William Powell, III in 1983 to be restored and used in Hart's 1987 PBS film *Flyers In Search of a Dream* written and produced with Tanya Hart. After Hart restored the film, he gave a print to the younger Powell and donated a print to the Smithsonian National Air and Space Museum which is now a part of the William J. Powell Collection; William J. Powell, *Black Wings* (Los Angeles, CA: Ivan Deach, Jr., 1934) with a new edition *Black Aviator: The Story of William J. Powell* with an introduction by Von Hardesty (Washington DC: Smithsonian Press, 1999); "Black Wings" written by Dan Wolf and produced by Dan Wolf and Philip S. Hart (Washington DC: Smithsonian Networks, 2012).

drop tester. He was the first and only African American employee at Standard Parachute Company. After working with Standard Parachute for a few years, Smith set out on his own with an investment from actor Eddie “Rochester” Anderson, who was Jack Benny’s foil on his popular radio show. With Anderson and others support, Smith launched Pacific Parachute Company in 1942 and was a subcontractor to Standard Parachute. Smith became one of the first Black owners of a defense factory. Pacific Parachute Company became a manifestation of William J. Powell’s vision of getting in on the ground floor of a growing aviation industry. Powell died in 1942, at age forty-five, the same year that Skippy Smith founded Pacific Parachute Company.⁶⁷

In 1934, Frank Calvin Mann (1908-1992) moved to Los Angeles’ suburb of Compton where he became an independent engineer. Aeronautics industrialist Howard Hughes hired Mann to work as an engineer with his new aircraft company. Hughes was a friend from Texas who Mann met when they were both adolescents with interests in aviation, engineering and problem solving. Already a pilot and aircraft builder, Mann does not appear to have had a connection with other Black aviators in Los Angeles such as William Powell or Herman Banning. Mann is not listed among the Black Americans holding pilot licenses as of December 31, 1932, as compiled by Illinois Congressman Oscar DePriest. Mann attended Prairie View A&M College (now University) and then earned a mechanical engineering degree at University of California, Los Angeles after attending University of Minnesota. Growing up in a time of racial

⁶⁷ Merrie Monteagudo, “From the Archives: ‘Skippy’ Smith made history in 1942,” *San Diego Union-Tribune*, March 29, 2022, acc. Aug. 24, 2023, <https://www.sandiegouniontribune.com/news/local-history/story/2022-03-29/from-the-archives-skippy-smith-made-history-in-1942>.

discrimination and segregation, with limited opportunities for African Americans, particularly in the aviation industry, he persevered.⁶⁸

As a pilot, Mann garnered attention for his exceptional flying skills and technical expertise. In 1939 Mann was one of the Black civilian aviation training instructors for Tuskegee Army Airfield in Alabama. He complained that the training planes the U.S. government supplied were in poor condition and left the program. During World War II he worked as one of the U.S. Army's aeronautics engineers to make airplanes lighter. He also worked on projects with Hughes to make weaponry more effective in airplane bombers. Mann also worked on cars in the 1950s, designing and building custom sports cars for Hollywood celebrities such as Herb Jefferies and Mickey Rooney. One of his car designs, the Baby Le Sabre modeled on the F-86 Sabre Jet, won *Motor Trend Magazine's* Best Sport Car of the Year. In the 1960s, Mann returned to work at Hughes' aerospace laboratories where he worked on several projects with National Aeronautics and Space Administration (NASA), including the Surveyor Moon Exploration Unit that sent the first photographs of the lunar surface back to Earth. He did early design work on the space shuttle and the Boeing 747 space shuttle carrier aircraft.⁶⁹

As an accomplished aviator, mechanical engineer and designer Mann played a significant role in the aviation industry during the twentieth century as an independent contractor for Lockheed, Boeing, and other aviation companies. His collaborations with the renowned aviation pioneer Hughes on and off for over two decades, including on the Spruce

⁶⁸ Powell, *Black Wings*, 1934, 148; "Frank Calvin Mann (1908-1992), BlackPast.org, March 10, 2021, acc. Aug. 23, 2023, <https://www.blackpast.org/african-american-history/people-african-american-history/frank-calvin-mann-1908-1992/#:~:text=From%201943%20to%201945%2C%20Mann,to%20carry%20troops%20to%20Europe>.

⁶⁹ "Frank Calvin Mann (1908-1992)," BlackPast.org, March 10, 2021; There is a wonderful photograph of Frank Mann with the Tuskegee Airmen when he was one of the group's flight instructors in H.T. Bryer's book, *Hidden Genius: Frank Mann, the Black Engineer Behind Howard Hughes* (Oak Harbor, OH: Grey Forest Press, LLC, 2011), 35.

Goose (the largest airplane ever built which was made of spruce and birch wood frame and ribs, which only made one flight from the Long Beach shoreline), further solidify his legacy as a trailblazer in the field of aviation and aeronautic engineering. Mann was also one of the stunt pilots along with Roscoe Turner and Pancho Barnes in Hughes' classic 1930s film *Hell's Angels*. As we reflect on Mann's achievements, we are reminded that true pioneers like him not only shape history, but also pave the way for a more inclusive and diverse future in aviation and beyond.⁷⁰

⁷⁰ Byer, 2011, 9-11, 33-38.



Fig. 40. Colored Air Circus Billboard, 1931. Hubert F. Julian (left), showman and promoter of Black aviation, points to a billboard announcing his appearance in a “Color Air Circus” with the Five Blackbirds in Los Angeles organized in part by the Bessie Coleman Aero Club. (Note Julian’s name is misspelled as “Rupert” on the billboard.) Two talented women aviators from the club who were also part of the Five Blackbirds were on the program, Marie Daughtry and Marie Dickerson, along with Matthew J. Champana, “The Human Arrow.” The popular band Frank Sebastian’s Cotton Club Orchestra and the Les Hite Band provided entertainment on the ground for spectators and with other well-liked acts of the era. Black Angeleno community groups, the Benjamin Bowie American Legion Post and the Golden West Lodge drill teams and others performed.

Image: <https://airandspace.si.edu/multimedia-gallery/99-15419640jpg>
National Air and Space Museum Archives, Smithsonian Institution



Fig. 41. African American aviator Hubert F. Julian (center, standing on folding chair) poses for photographers in front of his Bellanca J-2 (r/n NR-782W, one-half left front view) at Floyd Bennett Field, Long Island, NY, 1938-1939. The aircraft's propeller is draped with an American Flag and his airplane, Abyssinia, is about to be christen by Peggy Harding Shannon holding the roses and a bottle of champagne. Julian performed in air shows in Los Angeles during the 1930s with the Bessie Coleman Aero Club's Five Blackbirds.

Image: <https://airandspace.si.edu/multimedia-gallery/xra-8234jpg>
National Air and Space Museum Archives, Smithsonian Institution



Fig. 42. Bessie Coleman Aero Club, ca. 1932. William J. Powell (far right), a successful owner of several automobile service stations in Chicago, moved to Los Angeles to learn to fly. By the early 1930s Powell had organized the Bessie Coleman Aero Club to promote aviation awareness in the Black community. Men and women were welcome to participate. Marie Dickerson Coker is in the front row, third from the left. She was a member of the Five Blackbirds, the club's precision flight team. Other members of the club in the photo include Marie Daughtry and Irwin Wells, who was a co-founder of the club with Powell.

Image: <https://airandspace.si.edu/multimedia-gallery/9a01548hjpg>
National Air and Space Museum Archives, Smithsonian Institution

THE WESTERN FLYING SCHOOL OF AERONAUTICS

WESTERN AVENUE AIRPORT . . . 135th and Western Avenue



Mr. Aikens is shown standing beside his Meteor High Wing Mono-plane, powered with a 100 H.P. Kinner motor. Cruises at 110 MPH. Top speed, 135 MPH.

Joining
Fee
\$5.00

•
Month
Dues
\$1.00

The Western Flying School has spread its wings across the skies of Los Angeles in order that those who desire to learn to fly may have their chance to become great flyers in the future. This school is open to all who wish to become masters of the upper elements.

Mr. Aikens says, "It has been a great pleasure for me to put myself into a state of preparedness to be at your service. With your cooperation I am sure that this school of aeronautics will turn out great flyers and navigators and instructors. Now don't wait! This is an opportunity for your wishes to come true."

LOW INSTRUCTION FEE

You can learn to fly for only \$60.00. This includes 10 hours of flying instruction which will permit you to solo (to fly by yourself).

EASY BUDGET PAYMENTS CAN BE ARRANGED

It will not be necessary for you to pay the instruction fee in cash.

JOIN TODAY!! Only a limited number of students can be enrolled.

20 WOMEN WANTED

18 years to 30 years to join the Aviatrix Club. Joining fee \$1.00. This entitles each member to one airplane ride. See or phone Mrs. Aikens.



William Aikens

SPECIAL

6-Minute Airplane Ride . . . \$1.00

For further information phone ADams 8904 or write

WILLIAM AIKENS, Owner and Operator

3728 South San Pedro Street

Los Angeles, California

Fig. 43. Advertisement for William Aikens' Western Flying School of Aeronautics, Los Angeles, 1936-1939. It was announced in the *California Eagle* newspaper on July 17, 1936 that William Aikens earned his pilot license at Dycer Airfield at 94th Street and Western Avenue. He had two passengers that day, Ham Banks and Charles Hayworth who said they were very happy with their flying experience with Aikens and that he had a promising future in aviation. Aikens became a member of the African American flying group, the Five Blackbirds who were formed by the Bessie Coleman Aero Club.

Image: <https://digital.library.ucla.edu/catalog/ark:/21198/z19p4jrk>

Miriam Matthews Photograph Collection, OpenUCLA Collections



Fig. 44. Advertisement for the "First Transcontinental Flight from Los Angeles to New York," 1932. James Herman Banning, a pilot with mechanic Thomas C. Allen, became America's first Black aviators to make the 3,300 mile trip from Los Angeles to Long Island, NY in forty hours and twenty-seven minutes aloft. The two were affectionately known as the "Flying Hoboes," because they had to raise money for each leg of the trip.

Image: <https://digital.library.ucla.edu/catalog/ark:/21198/z1j6912n>

Miriam Matthews Photograph Collection, OpenUCLA Collections



Fig. 45. Howard "Skippy" Smith and Mac "Skip" Gravelle, ca. 1939. In the 1930s these two performed spectacular parachute jumps in air show around the Los Angeles area. After retiring from skydiving, Smith went to work at Standard Parachute in San Diego where he was the first African American hired for a major defense contract for the U.S. government. He started his own company, Pacific Parachute, which became a subcontractor of Standard Parachute.

Image: <https://www.searchablemuseum.com/the-pacific-parachute-company?#goto=118900>
Smithsonian National Museum of African American History and Culture



Fig. 46. Owner Howard "Skippy" Smith does a final inspection of pilot parachutes with his employees at the Pacific Parachute Company factory. Photo credit: Lee Russell, April, 1942.

Image: <https://www.loc.gov/resource/fsa.8d03453/>
Library of Congress



Fig. 47. Frank C. Mann with his Waco Biplane, ca. 1930. Mann, a Black engineer worked with aviation entrepreneur Howard Hughes, who he met when they were both teenagers in Houston, Texas. Mann became an engineer, aviator, stunt pilot, airplane designer, automobile designer, as well as a music lover and promoter. He joined Hughes Aircraft in California in 1934 where he was a Hughes collaborator on engineering projects and as a stunt pilot in movies that Hughes produced.

Courtesy of LinyonB (CC-BY-SA 4.0)

In addition to African Americans and Mexican Americans who caught the aviation bug there are more early Asian Americans to add to those mentioned earlier. One of the most well-known stunt fliers in the 1930s was Katherine Sui Fun Cheung (1904-2003). Born in Canton, China, she immigrated to the U.S. in 1921 at age seventeen. She became fascinated with airplanes after her father took her to Dycer Airfield to teach her how to drive a car. After leaving her primary interest in music to pursue a career in aviation, Cheung earned her pilot's license in 1932, becoming part of the one percent of licensed American pilots who were women and the first Chinese woman to earn a pilot's license in the U.S. or anywhere. She became a popular barnstorming pilot in air shows in Southern California and around the country. She also visited Chinatown communities around the U.S. to encourage Chinese American people to get involved with aviation activities as flyers and entrepreneurs. Also popular in China, Cheung was dubbed "China's Amelia Earhart." In 1935 Earhart invited her to join her prestigious Ninety-Nines Club, an international organization she co-founded for women pilots. After a long and productive life she died in 2003 at age ninety-eight with many aviation honors to her credit, including the Smithsonian National Air and Space Museum recognizing her as the first female Asian American aviator.⁷¹

Henry Ohye (b. 1910) saw his first airplane in 1924 when he was fourteen years old and was bitten by the aviation bug. His family moved to Los Angeles when he was seventeen. After saving money from various odd jobs in his hometown of Watsonville, California and in Los

⁷¹ "Asian-Americans in Aviation," San Diego Air and Space Museum, acc. Aug. 16, 2023, <https://sandiegoairandspace.org/exhibits/online-exhibit-page/asian-americans-in-aviation>; "Sui Fun Cheung: The First Asian American Aviator," Federal Aviation Administration, Aug. 23, 2022, acc. Sept. 19, 2023, <https://www.faa.gov/history/pioneers/katherine-sui-fun-cheung-first-asian-american-female-aviator>; "Katherine Sui Fun Cheung: Chinese-American Aviatrix," Museum of Chinese in America, acc. Sept. 19, 2023, <https://www.mocanyc.org/collections/stories/katherine-sui-fun-cheung-chinese-american-aviatrix/>.

Angeles, he was able to pay for flying lessons and finally make his first solo flight in 1928. Ohye became the first Nisei, or second-generation Japanese American, to earn his commercial aviation license in 1933. After being rejected in his desire to become a commercial pilot, Ohye persevered and opened a flight school at Mines Field, later to be called Los Angeles International Airport (LAX). After leading the creation of the Japanese Aeronautical Association (JAA) with the four other Nisei aviators in California — John Kenjo, George Hattori, James Saiki, and Richard Takeshiki — the group participated in local air shows. Anti-Japanese sentiment was growing in the late 1930s, and Ohye and his JAA colleagues were trying to counter this alarming trend.⁷²

Ohye and his JJA colleagues used the same approach that William Powell and his colleagues used a few years earlier in creating a flight school and organizing air shows as a way to try and offset bias and discrimination as well as open up the aviation field to their minoritized communities. One highlight for the JAA was to be able to give the visiting Japanese Imperial Training Squadron an aerial salute when the squadron flew into Los Angeles in April 19, 1933. Ohye organized the initial Nisei California Air Tournament in 1934 where the support of every Nisei pilot in California was mobilized. In the 1930s, as anti-Japanese sentiment intensified, Ohye had his parachute sabotaged before one of the National Air Races and it nearly cost him his life. After the Japanese attacked Pearl Harbor on December 7, 1941, Ohye and other Japanese Americans saw their lives changed dramatically. Ohye tried to join the Army Air Corps, but was rejected because of his race. Instead he and other Japanese Americans were

⁷² Burnett, 2011, 175-176; “Henry Shigeji Ohye,” CloverField.org, acc. Aug. 16, 2023, https://cloverfield.org/people/ohye_he/index.php.

sent to concentration camps. Ohye was sent to a camp in Gila, Arizona where he organized model airplane building classes for young boys to stimulate their interest in aviation.⁷³

After the end of World War II, Ohye became a successful automobile dealer. He continued to invest his time and money promoting aviation activities. He promoted a race from Los Angeles to Chicago in September 1950 where four young Nisei pilots competed against each other in what would become known as the “Henry Ohye Trophy Race,” which that year culminated at the 11th Biennial National Convention of the Japanese Citizen Legion. Ohye and his wife Shizuko took off in their private plane for the ceremonies in Chicago where the race was to end. Ohye’s Luscombe airplane, the “Spirit of Nisei” developed mechanical problems which caused him to crash land the plane safely on the side of a mountain in Mexico. After surviving this incident and hiking five hours through rugged terrain, Ohye and his wife Shizuko caught a commercial flight to Chicago and were on hand to congratulate Albert Kushihashi as the winning pilot.⁷⁴

Long Beach Airport would serve as the starting point of the Henry Ohye Trophy Race beginning in 1965 and continuing through 1981. The Long Beach City Council proclaimed June 15, 1968 “Henry Ohye Day” in recognition of the city’s pride in being a part of this event. Ohye’s significant aviation activities also included a 1964 solo flight when he was fifty-four years old. He was the first Japanese American to make a solo flight across the Pacific Ocean beginning at Long Beach Airport with a few stops in between before finally landing his single engine airplane

⁷³ “Early Aviation in Southern California” exhibition included a few other Asian American women and men aviation pioneers, Security Pacific Collection, Los Angeles Public Library, Sept. 1983, Los Angeles Public Library Photograph Collection Archives; Burnett, 2011, 176-177; “Henry Shigeji Ohye,” CloverField.org.

⁷⁴ Burnett, 2011, 176-177; “Henry Shigeji Ohye,” CloverField.org.

named “Toku-Hana” — to honor his immigrant parents, at Tokyo International Airport. Ohye took greetings and gifts to several U.S. sister cities in Japan including Long Beach’s sister city which was Yokkaichi. His goodwill gesture was well received by Japanese citizens, especially in Yokkaichi. Ohye passed away on May 12, 1987 at age seventy-seven in Northridge, California. He is remembered as a businessman and aviator who used flying as a way to ease the racial divide and contribute to furthering goodwill and friendship between the U.S. and Japan.⁷⁵

One of the most notable members of the Ninety-Nines — in addition to Amelia Earhart — was Pancho Barnes. Born Florence Leontine Lowe on July 22, 1901 in Pasadena, California into a wealthy family, Barnes learned to fly in 1928 after being bitten again by the aviation bug when she drove her cousin to his flying lessons. Her cousin’s flight instructor, World War I veteran Ben Catlin, then agreed to teach her how to fly. Barnes participated in the 1929 Women’s Air Derby where she survived a crash. With a Union Oil Company sponsorship in 1930, with her Travel Air Type R Mystery airplane at Metropolitan Airport in Van Nuys, Barnes beat Amelia Earhart’s airspeed record to become the “Fastest woman on Earth.” According to her flight logs, between 1928 and 1930 she often flew in and out of Long Beach Airport. Due to her skill as a pilot, she became the first female test pilot for Lockheed aircraft manufacturers which formed in 1926 and is today, Lockheed Martin Corporation. For a time, she also flew for Pickwick Airway from Los Angeles to Mexico City and Guatemala. It is said Barnes was the first

⁷⁵ Burnett, 2011, 177-178; Henry Ohye five-page biography 1968-70 from “Henry Shigeji Ohye,” CloverField.org, acc. Aug. 16, 2023, https://cloverfield.org/people/ohye_he/1968-70_HenryOhye_Biography.pdf.

woman to fly into interior Mexico. Pancho Barnes was known as a gregarious and generous person, and many memorable quotes were associated with her over the course of her career.⁷⁶

After her contract with Union Oil expired, Barnes moved to Hollywood to embark on a career as a stunt pilot. In 1931 she organized a union for stunt pilots, the Associated Motion Pictures Pilots. This union advocated for aviation safety while filming and asked for a standardized pay scale for the stunt pilots. She also flew in several movies about adventures in the air during this time, including Howard Hughes' 1930 film "*Hell's Angels*." In addition to Hughes, Barnes had made other useful connections in Hollywood. Unfortunately though, the Great Depression led to the loss of most of her money which she had inherited. Savaging what assets she could, Barnes bought 180 acres of land in the Mojave Desert near Edwards Air Force Base airfield. She opened and built up a dude ranch, a riding club, and a restaurant called The Happy Bottom Riding Club which became popular with her Hollywood friends and the many test pilots and other workers around the base.⁷⁷

In 1952 Barnes got into a conflict with the U.S. Air Force when a change of command happened at Edwards. She sued the Air Force and eventually prevailed. She received \$375,000 (which would be roughly equivalent to more than \$4.3 million today) for her property, which was taken via eminent domain for a new runway. She then moved to Cantil, California where

⁷⁶ "About Pancho Barnes," PanchoBarnes.com, acc. Aug. 16, 2023, <https://panchobarnes.com/about/>; 65, 78; "About Pancho Barnes," HappyBottomRidingClub.com, acc. Aug. 16, 2023, <https://happybottomridingclub.com/about-pancho/>; Lauren Kessler, *The Happy Bottom Riding Club: The Life and Times of Pancho Barnes* (New York, NY: Random House, 2000), 65, 76, 78; Pancho Barnes Flight Logs and Pickwick Airways material, Pancho Barnes Archives, June 20, 2023; Oral history interview with Smithsonian National Air and Space Museum curator Von Hardesty by Philip S. Hart, June 2022 via telephone.

⁷⁷ Karen Bush Gibson, *Women Aviators: 26 Stories of Pioneer Flights* (Chicago, Ill: Chicago Review Press, 2013), 12-13; "About Pancho Barnes," HappyBottomRidingClub.com, acc. Aug. 16, 2023, <https://happybottomridingclub.com/about-pancho/>; Pancho Barnes Flight Logs and Pickwick Airways material, Pancho Barnes Archives, June 20, 2023; Burnett, 2011, 134-136.

she tried to repeat her success at another location in the Mojave Desert. Despite this setback she regained her stature and became known as the “Mother of Edwards Air Force Base.”⁷⁸

Between 1910 and 1938, Long Beach Airport grew to be a major center of aviation activity in Southern California. By 1938, four major airlines — United, Trans World (TWA), American, and Western — announced plans to offer service from Long Beach. Meanwhile during this same period, other airfields had sprouted up to the north, south, east, and west of Long Beach. Long Beach Airport saw aviation notables such as Earl Daugherty, Al Ebrite, Frank Carpenter, Frank Hawks, Monty Montijo, Lloyd and Gladys O’Donnell, Amelia Earhart, Pancho Barnes, and Charles Lindbergh help bring it to prominence. At the same time African American aviators such as Bessie Coleman, James Herman Banning, William J. Powell, and Hubert Fauntleroy Julian were pursuing aviation careers at airfields such as Dycer in present day Gardena and Eastside in Montebello. All these pioneering pilots helped propel Southern California to the center of the growing aviation industry. Visionaries such as Earl Daugherty, William Powell, Katherine Sui Fun Cheung, and Henry Ohye were all correct in their efforts to make sure their respective communities of interest were fully included in this burgeoning and critically important industry.⁷⁹

As noted earlier, Long Beach Airport began construction in 1923. That airport opening preceded the dedication of Mines Field, the Los Angeles municipal airport that began operations on October 1, 1928. Before Los Angeles’ airport got off the ground, the Grand

⁷⁸ Consumer Price Index (CPI) Inflation Calculator, acc. Sept. 19, 2023, <https://www.in2013dollars.com/us/inflation/1952?amount=375000>.

⁷⁹ Gerrie Schipske, *Early Aviation in Long Beach*, 2009, 7-10; Hart, “Photo Essay - Early African American Aviators”; Hart, *Flying Free: America’s First Black Aviators*, 1992, 18, 24, 36, 43.

Central Airport in Glendale offered the first paved runway west of the Rocky Mountains and served as the departure point for the nation's first civilian transcontinental flight airline service.⁸⁰

The growth and development of the airfields, aviation, and aeronautics was substantial — from the Wright Brother's development of the airplane to World War I, and moving to the dawn of events that eventually led to World War II. Throughout that time, there were innovative air shows, stunt flying, parachute jumping, long distance flights and advances in the technology in airplane design, construction and maintenance. World War I saw the introduction of combat from the air. In 1926 Congress passed the U.S. Air Commerce Act, a cornerstone for aviation regulation and industry growth within the U.S. This legislation charged the Secretary of Commerce with fostering air commerce, issuing and enforcing air traffic rules, licensing pilots, certifying aircraft, establishing airways, and operating and maintaining aids to air navigation. This new Act put a damper on air shows and aerobatics that were seen as dangerous to both the pilots and audiences. Air stunt shows and flight competitions still occurred during the Great Depression era, but these kinds of events declined dramatically by the 1940s as aviation evolved into a more regularized and regulated tool of broader civilian transportation and military warfare. With this legislative advance, securing a foreign license on the part of American pilots declined as they could now seek to be licensed in their home country.

⁸⁰ Nathan Masters, "From Mines Field to LAX: The Early History of LA International Airport," KCET, July 25, 2012, acc. Aug. 16, 2023, <https://www.kcet.org/shows/lost-la/from-mines-field-to-lax-the-early-history-of-l-a-international-airport>.

Perhaps even more importantly, this Act made it illegal to fly an airplane in the U.S. without a license, which had been a widespread practice prior to 1926.⁸¹

⁸¹ Schipske, *Early Aviation in Long Beach*, 2009, 47-52; Marc Wortman, *The Millionaires' Unit: The Aristocratic Flyboys who Fought the Great War and Invented American Airpower* (New York, NY: Public Affairs, 2006) 5-15; Andrew Glass, "Congress passed Air Commerce Act, May 20, 1926," Politico, May 20, 2013, acc. Aug. 16, 2023, <https://www.politico.com/story/2013/05/this-day-in-politics-091600>.

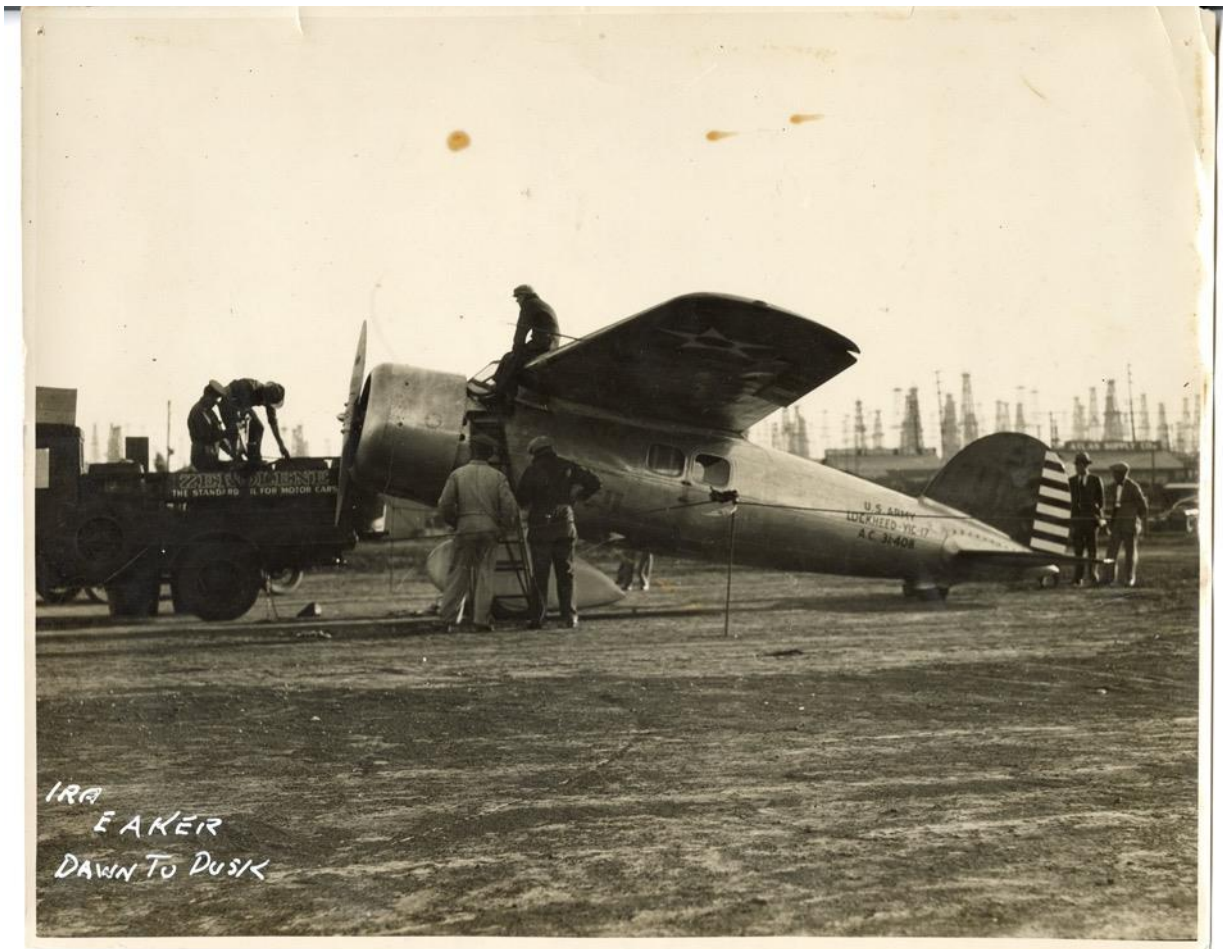


Fig. 48. The U.S. Army Lockheed Y1C-17 airplane also called the "Speed Vega" is one of the earlier cabin aircraft made of metal which could carry a pilot and passengers, ca. early 1930s. Here this airplane is getting Standard Oil fuel from a truck. Earlier airplanes had open cockpits and were made of wood or bamboo frames with fabric. Amelia Earhart was the first woman pilot to fly solo across the Atlantic Ocean in a version of this aircraft in 1932. Note the oil wells which supported new employment and regional economic development in the background.

Image: 2011.038.285, Long Beach Airport folder 2011.038.437.501, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
Historical Society of Long Beach



Fig. 49. Chinese immigrant Katherine Sui Fun Cheung learned to fly in the U.S. through the Chinese Aeronautical Association in Los Angeles with pilot Bert Ekstein. She earned her license in 1932 to become the first woman pilot of Chinese descent in the U.S. and went on to become a famed stunt air show performer. Cheung is recognized as the first Asian woman aviator by the Smithsonian National Air and Space Museum and was inducted into the Women in Aviation International Pioneer Hall of Fame. A statute was built of Cheung in Enping, China celebrating her as a world-renowned woman aviator.

Image: <https://www.mocanyc.org/collections/stories/katherine-sui-fun-cheung-chinese-american-aviatrix/>

Courtesy of Dottie Leschencko, Museum of Chinese in America (MOCA) Collection

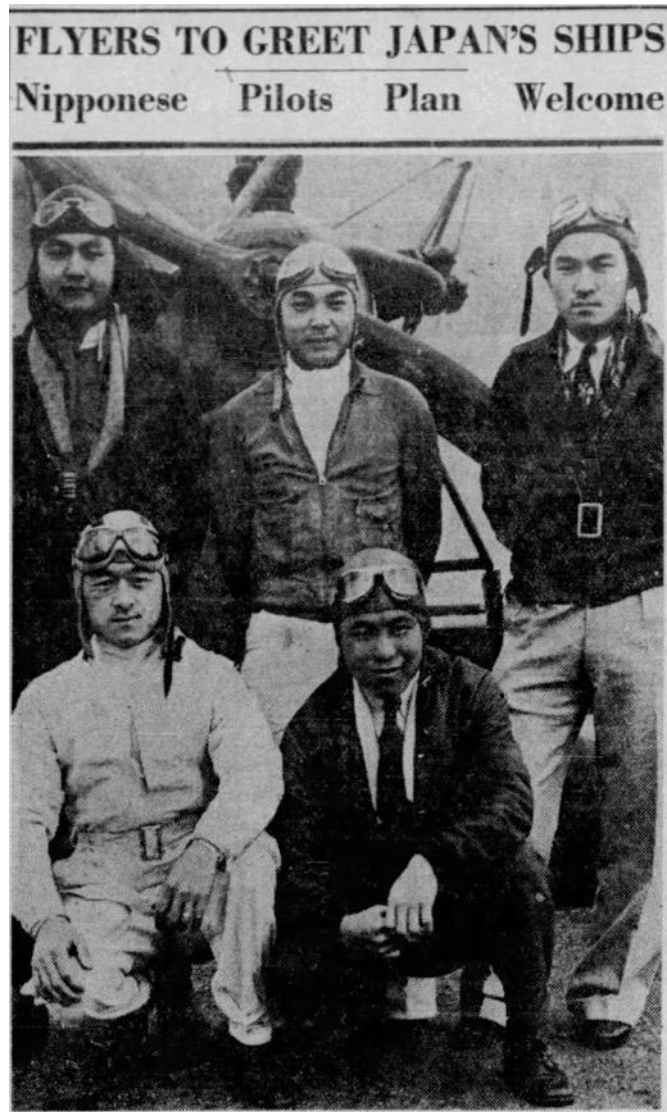


Fig. 50. Member pilots of the Japanese Aeronautics Association in a Los Angeles newspaper article announcing they would do an aerial salute when the Japan Imperial Training Squadron flew into Los Angeles, April 19, 1933. Left to right: kneeling, Henry Ohye (founder) and John Kenjo; standing, George Hattori, James Saiki and Richard Takeshiki. The U.S. government incarcerated these Japanese American pilots in concentration camps during World War II rather than using their aviation skills in the armed services. After the war, Ohye continued his interest in aviation and began the "Henry Ohye Trophy Race" for which Long Beach Airport served as the starting point from 1965-1985. Credit Line: A.P. Photo.

Courtesy of "Flyers to Greet Japan's Ships," *Los Angeles Times*, April 18, 1933, P. II, 16.

World War II Launches Decades of Growth in the Aviation and Aeronautics Industries and the Entry of More Diverse Participants

Long Beach officials set the stage for their city's industrial transformation with the early establishment of a municipally-owned airport and their general enthusiasm for aviation in this era. The Long Beach Airport had become one of the most successful airports in the U.S. by 1940 due to accessibility to railroads, highways and ocean ports. Work Progress Administration money helped upgrade the Long Beach Airport military facilities and helped John K. Northrop to open an aircraft manufacturing plant, which brought new employment opportunities for local residents in 1939 and supported the World War II European warfare campaigns before U.S. entry. WPA funding also aided the construction and opening of a new airport terminal and administration building with a restaurant by 1941. As a result of the Pearl Harbor attack on December 7, 1941, all commercial aviation flights were canceled for a while. The formal opening of the building would not take place until April 25, 1942. During the war the building would be used by the military for lodging soldiers and equipment with the exterior painted in camouflage colors until 1945 after which it was repainted in its original white color.⁸²

The new terminal building was an important marker of the expanded importance of civilian air travel, coupled with the control tower to direct traffic erected in 1936 by the U.S. Civil Aeronautic Authority. Long Beach was becoming a center for commercial aviation.

⁸² "City of Long Beach Historic Context Statement," July 10, 2009, 113, 150; Schipske, 2009, 118; Kate Kuykendall, "Airport Temporarily Closes Historic Terminal for Major Renovation," Long Beach Airport, Feb. 21, 2023, acc. Oct. 10, 2023, <https://www.longbeach.gov/lgb/news/2-21-23-long-beach-airport-temporarily-closes-historic-terminal-for-major-renovations/>.

Declared a Long Beach cultural historical landmark in 1990, the main terminal building was designed in the Streamline Moderne style by well-known Long Beach architects of the era William Horace Austin and Kenneth Smith Wing. The building's original painted wall murals and multi-color tile floor mosaics were designed by artist Grace Richardson Clements to reflect Long Beach's importance as an ocean and air travel hub and oil producer, with depictions of oil production, ocean transportation, modern communications tools, aviation, navigation, constellations, seagulls, and fish. The mosaic tile floor also features the Long Beach city seal which includes elements of the California state seal and a map of air travel routes around the world which could be connected to with the Long Beach Airport as the starting place. Clements brought in several women artists to work with her creating and installing these murals, which were unfortunately painted over. The mosaics tile floors with thirty-two different colors are still intact.⁸³

In addition to the notable pioneering men and women private sector pilots and entrepreneurs associated with varied aviation activities mentioned earlier in this essay, the flight and mechanic students of the Army Reserve and Navy Reserve Air Bases had used the Long Beach Airport since the 1920s. During one period from 1935 to 1942 the Long Beach base produced thousands more Naval aviators than any other base in the Navy's Reserve system. This U.S. armed service branch helped to keep Long Beach's airport viable during the lean years of the Great Depression and as mentioned earlier contributed greatly to the local economy.

⁸³ "Long Beach Municipal Airport: Clement Mosaics – Long Beach, CA," Living New Deal, acc. Sept. 15, 2023, <https://livingnewdeal.org/sites/long-beach-municipal-airport-clement-mosaics-long-beach-ca/>; Brandon Richardson, "Preserving the past: Work begins on Long Beach Airport's historic terminal building," *Long Beach Business Journal*, acc. Sept. 15, 2023, <https://lbbusinessjournal.com/news/preserving-the-past-work-begins-on-long-beach-airports-historic-terminal-building/>; Burnett, 2011, 186-187.

Some of these Naval aviation students went on to make important accomplishments as aviators and in leadership positions in this armed service branch. There were several prominent motion pictures with pilots and airplanes made at the Long Beach Airport Naval Air Base such as *Hell Drivers*, *Wings of the Navy*, *Flight Command* and *Dive Bomber*, as well as Naval training and recruitment films. The motion pictures were good public relations tools for the armed services as well as for the movie industry and aided in recruitment of personnel for flight schools in the pre-World War II years.⁸⁴

The airport's location, facilities and military presence joined major airline service for civilian air travel to impact the growth and development of the aviation and aeronautics industries in Long Beach and Southern California for decades to come. Due to all the manufacturing activities that emerged in the 1940s, Los Angeles County would become "the Detroit of American aircraft" as California historian Kevin Starr observed. More than four-thousand separate defense plants contributing to all parts of aerospace manufacturing opened up in Los Angeles and Orange counties with Long Beach being one of the largest hubs.⁸⁵

As the U.S. was about to formally enter World War II, a few months before in September 1941, the Army Air Corps took control of the Long Beach Airport via a twenty-five-year lease rental agreement that did not interfere with civilian operations. This made Long Beach the headquarters for ferrying multiple types of aircraft manufactured in Southern California to destinations around the world, including bases and battle sites. A Naval Air Ferrying division

⁸⁴ Allen E. Morgan, "A History of NRAB Long Beach," *Foundation*, Vol. 27, No. 1 (Spr. 2006): 99, 101-102; Allen E. Morgan, "Post Script NRAB Long Beach," *American Aviation Historical Society Journal*, Vol. 17, No. 3 (Fall 1972): 191.

⁸⁵ "City of Long Beach Historic Context Statement," July 10, 2009, 87, 113; Kevin Starr, *Embattled Dreams: California in War and Peace, 1940-1950* (New York, NY: Oxford University Press, 2003), 53.

would also open at Reeves Field — renamed Roosevelt Naval Base in 1941 — on Terminal Island in the San Pedro Bay Port Complex. Paul R. Williams, one of the first licensed African American architects in the U.S. with Adria Wilson — as members of Allied Engineers — were the designers of this new facility. The U.S. entry into World War II after the attack by Japan on Pearl Harbor in Hawaii in December 1941 and these armed services ferrying bases joined Southern California aircraft manufacturing to open a few new opportunities for a broader composition of Americans to obtain jobs in aerospace and the defense industries during this era and beyond in the region and the nation. Only limited opportunities in the aerospace and defense industries would open up for Black, Latinx, Asian, Indigenous, and other persons of color communities as discrimination remained a significant factor in their hiring and abilities to find housing in Long Beach, other Southern California communities and around the nation near these new modern industrial hubs.⁸⁶

Writer Walter Mosley in his mystery novels of detective fiction with descriptions of the social history of the 1940s to 1960s that includes racial inequities, social injustice and societal changes experienced by African Americans and other minoritized people in Los Angeles and vicinity — features the fictional character Ezekiel P. “Easy” Rawlins as a Texas migrant to the region and a World War II Army Air Corps veteran who served as a mechanic. After the war Rawlins became an aircraft assembly plant worker turned private eye who lives in the Watts community. In *Devil in a Blue Dress* (1990) which was also made into a 1995 film of the same

⁸⁶ “City of Long Beach Historic Context Statement,” July 10, 2009, 87-88; Burnett, 2011, 201-218; “Historic Context Statement: Suburbanization & Race, City of Long Beach,” May 19, 2022, Prepared by Historic Resources Group, acc. Sept. 16, 2023, <https://www.longbeach.gov/lbds/planning/preservation/historic-context-statement/>; Claudine Burnett, *African Americans in Long Beach and Southern California: A History* (Bloomington, IN: AuthorHouse, 2021), 210-212; “Gallery, Roosevelt Naval Base, Long Beach, CA,” Paul R. Williams, *American Architect: A Man and his Work*, acc. Sept. 28, 2023, <https://www.paulrwilliamsproject.org/index.html.1.131.html>.

name starring Denzel Washington, the character Rawlins gets into a dispute with his White supervisor who thinks this Black employee at the fictional Champion Aircraft Company does not sufficiently show deference to this White boss, so he fires Rollins. The Rollins character wears a khaki colored windbreaker with a Champion company logo in blue throughout the film reminding viewers that he's "a champion" marginalized in the aircraft industry and society due to White supremacy and social injustice. Mosley has said he writes about the people he saw around him growing up in Los Angeles and to remember Black California life during the period that has not been included in history books and whose stories had not been interpreted in literature. In the writing of this essay we have found Mosley's observation of Black California and other people of color's association with the aviation, defense and related industries has limited documentation, but his work and ours aid to remind us there is more work that must be done to get these stories documented and interpreted.⁸⁷

As aviation took on added global importance with the U.S entry into World War II, the Army Air Corps needed fighter or combat pilots. With some reluctance, the Army agreed to allow Black soldiers to train for aviation combat at Tuskegee Army Air Field in Alabama. This training program which took place between 1941 and 1945, became known as the "Tuskegee Experiment." When the all-Black 99th Fighter Squadron was sent into action in March 1941, Black Americans finally become part of military aviation in the U.S. But the Army was still

⁸⁷ "Walter Mosley On The Stories Of LA Told Through Easy Rawlins," Morning Addition, NPR, July 28, 2016, acc. Oct. 8, 2023, <https://www.npr.org/2016/07/28/487729929/walter-mosley-on-the-stories-of-la-told-through-easy-rawlins>; Chester Himes in his novel, *If He Hollers Let Him Go* (Cambridge, MA: De Capo Press, 1945/1986/2002) tells of a Black California ship building worker's experience during World War II with American racism and the lead character Bob Jones' desire for the democratic ideals he was taught in school growing up in Ohio and for racial justice.

segregated. The Black pilots who trained at the Tuskegee Army Air Field essentially belonged to a separate Black air force.⁸⁸

Lieutenant Colonel Benjamin O. Davis (1912-2002) played an important role in the Tuskegee Experiment, including the training of the pilots and lobbying to keep the program alive when there were those who wanted it canceled. It was a good thing Davis prevailed, for in the war over Europe the 99th Fighter Squadron joined the 100th, the 301st, and the 302nd, to form the all-Black 332nd Fighter Group. The Black fighter squadrons flew in Allied campaigns in North Africa, Sicily, Italy, and Germany. They escorted bombers, fired on enemy positions in support of Allied ground forces, and engaged in air combat. Called the “Red Tails” because of the distinctive tail markings on their aircraft, the 332nd fighter pilots became known for their effectiveness.⁸⁹

Just as the Bessie Coleman Aero Club and the Chicago Air Pilots Association showcased capable civilian pilots, the Tuskegee Experiment success showcased Black Americans trained in large numbers for combat flying. The abilities of the Black pilots and the skillful leadership of their commander, Lt. Col. Davis (later he earned the rank of General), helped ease White hostility toward Blacks in military aviation. But bias and discrimination still dogged the Black fighter pilots, just as it had the pioneer Black aviators and the African American community generally.⁹⁰

⁸⁸ Hart, *Flying Free: America's First Black Aviators*, 1992, 52; Hardesty, *Black Wings*, 2008, 86-110.

⁸⁹ Hart, *Flying Free: America's First Black Aviators*, 1992, 52; Von Hardesty and Dominick Pisano, *Black Wings: The American Black in Aviation* (Washington, D.C.: Smithsonian Institution Press, 1983), 85.

⁹⁰ Hart, *Flying Free: Americans First Black Aviators*, 1992, 53.

Tuskegee Airmen Aaron Harrington moved to Long Beach in 1948 where he served in the military until retiring in 1968. He was active in the Long Beach community and as a member in the Los Angeles chapter of the Tuskegee Airmen group until his death at ninety-five years old in October 1995. Harrington's wife Maycie Herrington was a social worker in Long Beach, community activist, and known for her work in preserving the history of the Tuskegee Airmen. The Herringtons married in 1943, during World War II. Aaron Harrington was then sent by the Army to Tuskegee for flight training. Maycie Herrington (1918-2019) became a familiar face to the Tuskegee Airmen working in support roles with the Red Cross and the unit's administrative office. After the war the young couple moved to Long Beach after her brother, who was stationed in the city, suggested to them they should move West. Aaron Harrington and all the Tuskegee Airmen received Congressional Gold Medals for their service in 2007. Maycie Herrington accepted Aaron's posthumous award that day and also her own Congressional Gold Medal for her efforts as a civilian worker supporting the Tuskegee Airmen. She was also recognized for her activities in keeping their history alive in public memory through varied education materials including a set of Tuskegee Airmen trading cards.⁹¹

Robert Friend was a member of the Tuskegee Airmen who also relocated to Long Beach after the end of World War II. Friend was a retired U.S. Air Force Lieutenant Colonel who flew

⁹¹ Burnett, 2011, 217; Sunny Nash, ed., *Untold Legacies: A Pictorial History, Black Long Beach 1900-200 & Beyond* with forward by Marie Treacwell (Long Beach, CA: National Council of Negro Women, Inc., 2007), 40-41; Phillip Zonkel, "Maycie Herrington, 1918-2016: Long Beach woman who preserved Tuskegee Airman history dies at 97," *Long Beach Press-Telegram*, May 25, 2016, acc. Sept. 15, 2023, <https://www.presstelegram.com/2016/05/25/maycie-herrington-1918-2016-long-beach-woman-who-preserved-tuskegee-airmen-history-dies-at-97/>; Kay Gault, "Maycie Herrington: A Woman's Place in the Spotlight," Historical Society of Long Beach, acc. Aug. 16, 2023, <https://www.hslb.org/maycie-herrington>; "Maycie Herrington," Interview, The HistoryMakers: The Digital Repository for the Black Experience, acc. Sept. 15, 2023, <https://www.thehistorymakers.org/biography/maycie-herrington-39>.

142 combat missions during the war, including missions in North Africa and Europe. He was born in Columbia, South Carolina in 1920 and died in Long Beach at age ninety-nine in 2019. Friend also served in the Korean and Vietnam wars, retiring after a twenty-eight-year career in the U.S. Air Force. After retiring Friend continued working on aerospace products for the Space Shuttle program, leading a company that created components for the international space station, and weapon and missile development for the U.S. Air Force.⁹²

Perry W. Lindsey, who became Long Beach's first African American school principal in the 1960s, was also a Tuskegee Airman. He graduated on October 16, 1945, with the rank of Second Lieutenant. Following the war, Lindsey earned his commercial pilot's license but could not find work since most airlines refused to hire Black pilots. He became a teacher working in public schools in Kansas City, Missouri, while pursuing his master's degree at the University of Missouri. In 1951 he was called back to active duty during the Korean War, where he flew twenty-six combat missions in the newly integrated U.S. Air Force. In 1953 he returned to Long Beach to teach in the public schools while he worked to earn his doctorate at University of Southern California. He moved from teaching to administration and in 1969 became the district's first Black principal. He retired in 1987 and in 2008 four years after his death at age eighty-one — Long Beach's Sutter Elementary School was renamed Perry Lindsey Academy Middle School in his honor.⁹³

The idea of a government-supported Black air force started in the 1930s with Emperor Haile Selassie's efforts in Ethiopia. Three Black American flyers heard Selassie's call for building

⁹² "One of WWII's original Tuskegee Airmen dies at 99," CNN Wire, FOX 5 TV, June 23, 2019, acc. Aug. 16, 2023, <https://fox5sandiego.com/news/trending/one-of-wwiis-original-tuskegee-airmen-dies-at-99/>.

⁹³ Claudine Burnett, *African Americans in Long Beach...*, 2021, 230-231; Nash, 2007, 65.

an air force to combat Benito Mussolini's Italian invasion. They traveled separately to that East African country to lend a hand, given their exclusion from military aviation in their home country in the 1930s. Hubert Julian was the first American pilot to make that journey to Ethiopia to help organize and train an air force. Julian was followed by Frank Mann, and then John C. Robinson who was a member of the Chicago Air Pilots Association. Both Julian and Mann had roles in the growth of aviation participation by Black pilots in Southern California, while Robinson played a similar role in Chicago in the 1930s. Of these three aces, Robinson, called "the Father of Tuskegee Airman" and who was nicknamed "Brown Condor of Ethiopia" had the most impact in helping develop an Ethiopian Air Force. In fact, he was buried in Addis Ababa after perishing in a plane crash. Indeed, it was Robinson and his fellow Chicago aviator Cornelius Coffey who flew from Chicago to Tuskegee in 1937 to try and persuade the Tuskegee Institute's leadership to set up a program to train military pilots for the U.S. Their proposal was rejected, and — to add insult to injury — their airplane crashed on the flight back to Chicago. Just two years later in 1939, the seed Robinson and Coffey planted blossomed into the Civilian Pilot Training Program established at Tuskegee Institute.⁹⁴

A variety of films have been made about the combat pilot accomplishments of the Tuskegee Airmen for recruitment, propaganda, and entertainment for domestic and foreign consumption. A U.S. Army Signal Corps recruitment film *Wings For this Man* narrated by Ronald

⁹⁴ Col. Hubert F. Julian is seen with Emperor Haile Selassie in Ethiopia in 1935 in rare film footage and Cornelius Coffey makes comments in film, *Flyers in Search of a Dream* (PBS, 1987/PBS Home Video, 2006); H.T. Bryer and P. Bryer, *Hidden Genius*, 2006; Hart, "Photo essay - Early African American Aviators"; Hart, *Flying Free: America's First Black Aviators*, 1992, 52; Michael Bonner, "The Brown Condor of Ethiopia: The Determination of John C. Robinson, Hero of Gulfport," Mississippi Aviation Heritage Museum, Feb. 28, 2021, acc. Sept. 2, 2023, <https://msaviationmuseum.org/blog/the-brown-condor-of-ethiopia-the-determination-of-john-c-robinson-hero-of-gulfport>.

Reagan offered a portrayal of the Tuskegee Army Air Field in Alabama. The film has been featured in many exhibitions and programming including at the Smithsonian National Air and Space Museum in Washington D.C., at the Academy Museum in Los Angeles and other places. The first scripted, dramatic telling of the Tuskegee Airmen story was with the 1995 HBO television movie *The Tuskegee Airmen*, directed by Robert Markowitz. It was not until 2012 after a long period of development, that a Tuskegee Airman feature film appeared in theaters. The film *Red Tails* was financed by George Lucas when the major studios refused to put money up to produce it. Lucas served as executive producer and director, while Anthony Hemingway was the co-director in his first major directing assignment. *Red Tails* was a modest critical and commercial success, with a story line in the American filmmaking tradition about wartime adventures, this time with African American combat pilots. More recently, artist Chase Hall, who is based in New York and Los Angeles, has done an insightful painting titled *Tuskegee Airman* (2022) to celebrate the accomplishments and fortitude of these pioneering World War II aviators; it also recognizes the social injustice they endured in the armed services and in their own country as they fought for freedoms, full citizenship and equity aboard and in the U.S.⁹⁵

⁹⁵ Oral history interview with *Red Tails* producer Charles Floyd Johnson by Philip S. Hart, January 2013; Courtland Milloy, “‘Red Tails’ a disservice to Tuskegee Airmen,” *The Washington Post*, Jan. 29, 2012, acc. Sept. 20, 2023, https://www.washingtonpost.com/local/red-tails-a-disservice-to-tuskegee-airmen/2012/01/29/gIQAEkHwaQ_story.html; Lena Williams, “Cover Story: Flying in the Face of Discrimination,” *New York Times*, Aug. 20, 1995, acc. Sept. 20, 2023, <https://www.nytimes.com/1995/08/20/tv/cover-story-flying-in-the-face-of-discrimination.html>; Chase Hall, *The Close of Day* (Savannah, GA: Savannah College of Art and Design, 2023), 37-39.



Fig. 51. Aerial view of the historic Long Beach Airport Terminal and administration building from the parking lot out to the airfield, ca. 1950s. The 1941 Streamline Moderne style building features symmetry and geometric abstraction of the post-war International style with smooth walls, minimal ornamentation, flat roofs, railings, and nautical porthole window. The City of Long Beach declared the terminal building a local landmark in 1990.

Image: Second Post .jpg
Long Beach Airport Archives



Fig. 52. View from the parking lot to the front entrance of the passenger station of the historic Long Beach Airport Terminal and administration building when the full name of the airfield was still being publicly used, Daugherty Field-Long Beach Municipal Airport, ca. 1940s-1950s. The Streamline Moderne style building was designed by William Horace Austin and Kenneth Smith Wing. The interior features mosaic ceramic tile floors by artist Grace Clements funded by the federal Work Progress Administration (WPA), 1930s New Deal-era program. The three-story building with a tower is arched towards the parking lot. The building was used as military housing during World War II. It was painted in camouflage colors until 1945, when it was repainted to its original white color.

Image: EDITED - 02 Front view of Passenger Station.jpg
Long Beach Airport Archives



Fig. 53. View from the airfield side entrance of the passenger station of the historic Long Beach Airport Terminal and administration building, no date.

Image: #2 - Terminal Airside.jpg
Long Beach Airport Archives



Fig. 54. One of the workers assembling one of the Grace Clements' masterwork of mosaics in ceramic tile floors installed over most of the 4,300 square feet of the historic terminal of the Long Beach Airport which opened in 1941. Originally the artwork included nine vignettes made up of 1.6 million hand-cut tiles and several wall murals. The one featured here is of seagulls. With the airport terminal's 2023-2024 rehabilitation and upgrade project the mosaics are being restored for visitors and travelers to enjoy as they move through the space. Unfortunately the wall murals were lost to various building remodels over the last eighty plus years.

Image: G-Clements_LB-4 copy.jpg
Long Beach Airport Archives

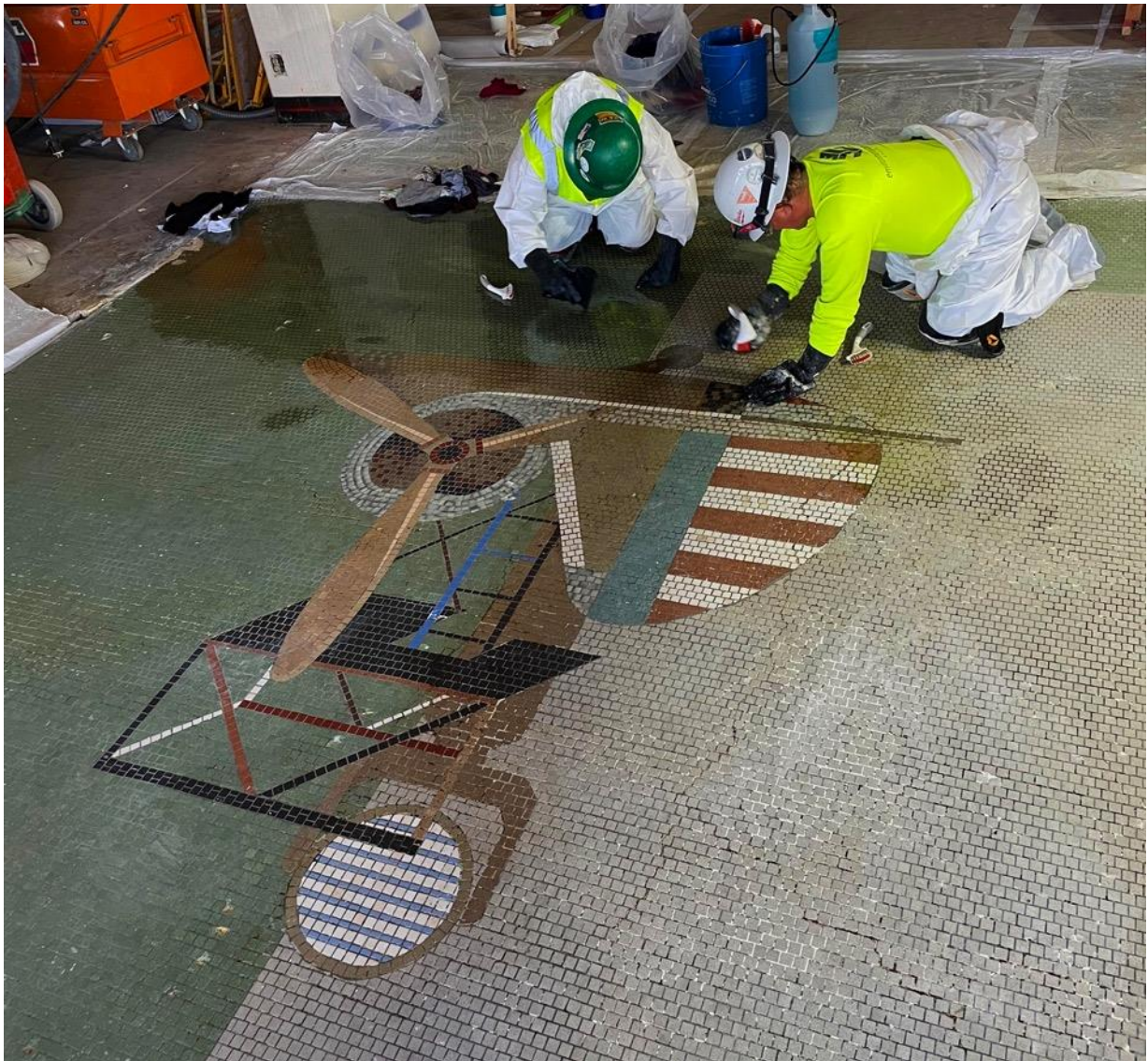


Fig. 55. Grace Clements' artwork of colorful mosaic ceramic tile floors (and now lost wall murals) titled "Communication (Aviation and Navigation)," illustrate various stylized modes of communicating thought symbolic representations of transportation types, a flight route map, a rotary telephone, maritime symbols, and other in the mosaic tile floors of the historic terminal building at the Long Beach Airport. The above tile vignette of an abstracted airplane with other related flying theme elements and an American flag being restored in 2023-2024.

Image: RELEASE Mosaic Unveil Plane (1).jpg
Long Beach Airport Archives



Fig. 56. The historic Long Beach Airport Terminal passenger station ticketing lobby with flight route map artwork in the colorful mosaic tile floor by Grace Clements.

Image: Terminal Interior.jpg
Long Beach Airport Archives

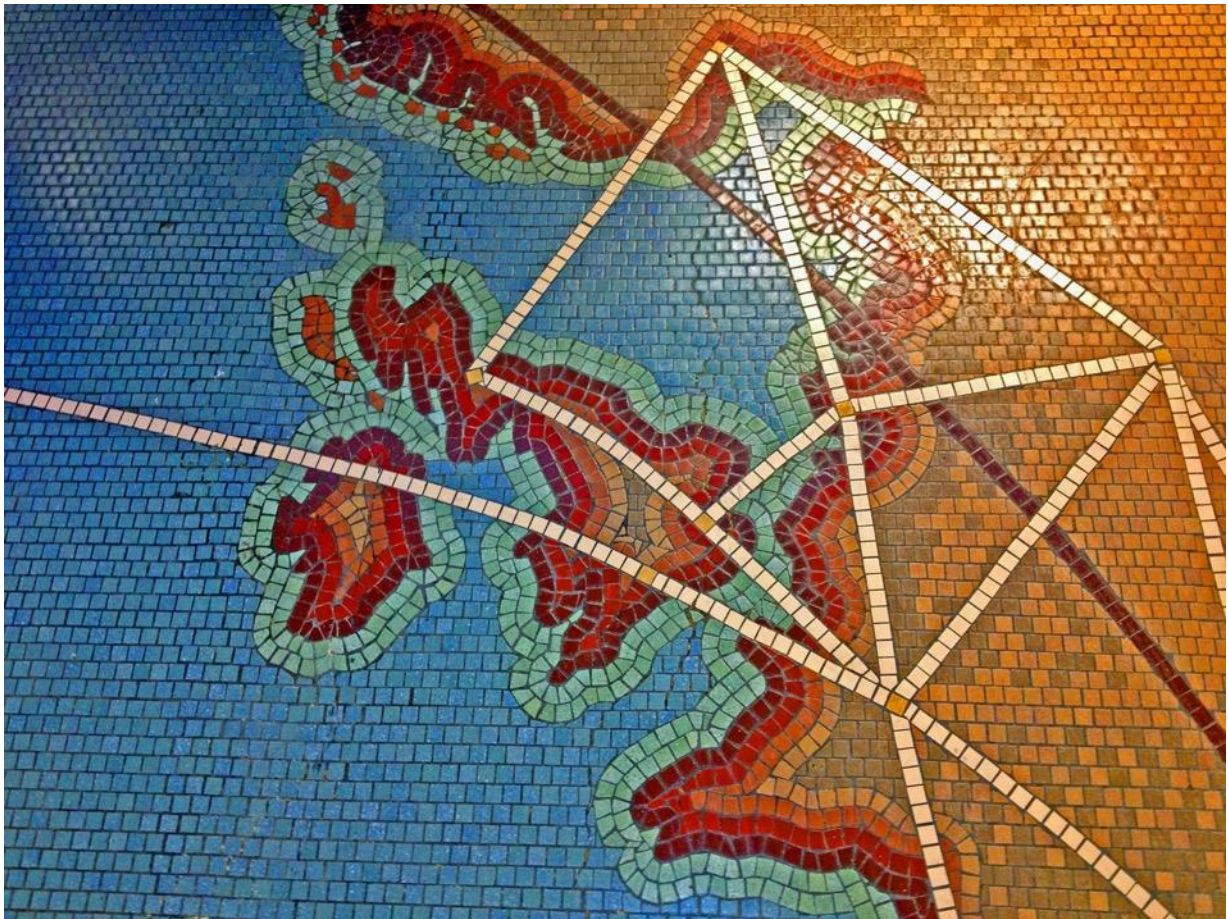


Fig. 57. Detail of flight route map artwork featured in the colorful mosaic tile floor by Grace Clements in the historic Long Beach Airport Terminal passenger station ticketing lobby.

Image: Map 2 - Floor Mosaic.jpg
Long Beach Airport Archives



Fig. 58. Detail of the zodiac, compass, and constellations of the northern hemisphere artwork featured in the colorful mosaic tile floor by Grace Clements on the second level of the historic Long Beach Airport Terminal.

Image: Zodiac DSC_8532.jpg
Long Beach Airport Archives



Fig. 59. Detail of the Long Beach city seal with elements of the California state seal featured in the colorful mosaic tile floor by Grace Clements in the airport historic terminal at the main entrance on the first floor. Note the yellow tile stylized airplane (top right) over the smoke stacks.

Image: mosaic_brochure 026.jpg
Long Beach Airport Archives



Fig. 60. U.S. Navy VR-5, printed just to the right of numbers 592, was abbreviation for the U.S. Navy Air Transport Squadron from 1942 to 1958. This Navy squadron flew Douglas R-4D "Skytrain" airplanes that were built at the Long Beach plant, in 1941. This was the first aircraft specifically built for transporting military personnel. The British also used this airplane and called it the Dakota Mk.I. This military aircraft evolved out of the Douglas Commercial-3, "DC-3," civilian transport aircraft first produced in the 1930s and that had a lasting impact on the airline industry.

Image: 2011.038.343, Naval Aviation folder, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142

Long Beach Historical Society



Fig. 61. Group portrait, Tuskegee Army Flying School, ca. 1942-1945. Dubbed the “The Tuskegee Experiment,” African American service men were the first Black flying unit in the U.S. armed forces in the Army Air Force and they trained at the Tuskegee Army Air Field in Alabama during World War II. Today, anyone -- man or woman, military or civilian, Black or White — who served at Tuskegee Army Air Field or in any of the programs stemming from the “Tuskegee Experiment” between the years 1941-1949 is considered to be a Documented Original Tuskegee Airmen (DOTA).

Image: <https://calisphere.org/item/ark:/86086/n2hq42f1/>

William B. Ellis papers, University of California, Riverside, Special Collections and University Archives



Fig. 62. *Tuskegee Airman*, 2022 by Chase Hall. Acrylic and coffee on cotton canvas, 72 x 60 x 1 ¼ inches (182.9 x 152.4 x 3.2 cm). In an embrace of the past and the present, Hall's painting celebrates the accomplishments and fortitude of these pioneering World War II aviators that also recognizes the social injustice they endured in the armed services and in their own country as they fought for freedoms, full citizenship and equity aboard and in the U.S. Photo by Dario Lasagni

Courtesy of Artist and David Kordansky Gallery

The opportunity to fly combat missions in World War II like the Tuskegee Airmen succeeded at was not available to Japanese Americans such as Henry Ohye. Instead, Ohye and other Japanese Americans saw their property and possessions seized as they were incarcerated in concentration camps spread across the Western U.S. This Japanese incarceration policy was promulgated by President Franklin D. Roosevelt's administration and was predicated upon the conflict with Japan in World War II precipitated by Pearl Harbor. In this instance the U.S. government showed the world how its Jim Crow policies and practices could be applied depending upon the circumstance. With the advent of World War II, it was not great to be African American in the U.S., but it was easier than being Japanese American.

African Americans and Hispanics serving in military combat units during World War II returned home to discover that the bias and discrimination were still real as their benefits for brave service paled in comparison to their White counterparts. Women also found a role with military aviation in World War II with the Women Air Force Service Pilots (WASP). Similar to their minoritized male counterparts, the women in the WASP program found that they too were on the short end of the stick in terms of both recognition and benefits once the war ended. The program banned Black women from being included in this group of aviators thus adding emphasis to the "WASP" acronym (referring to White Anglo Saxon Protestant in addition to the air force acronym).⁹⁶

⁹⁶ Burnett, 2011, 169, 211-215; Em Steck, "Women Airforce Service Pilots Aided American War Efforts With Help From These Women of Color," *Teen Vogue*, December 24, 2017, acc. Aug. 16, 2023, <https://www.teenvogue.com/story/women-airforce-service-pilots-aided-american-war-efforts-with-help-from-these-women-of-color>.

World War II saw a significant increase in the demand for military aviation personnel, material and equipment. Military expenditures rose from a few hundred million dollars a year before the war to \$85 billion in 1943 and \$91 billion in 1944, benefiting the aviation and aeronautics manufacturing industries in and around Long Beach Airport. The war effort and subsequent federal resources devoted to it created a vital private sector economy centered in Long Beach and Southern California. World War II was a major boost for Douglas Aircraft Company (today part of The Boeing Company) which produced almost thirty-thousand aircraft from 1942 to 1945, and its workforce grew to 160,000 company wide. Douglas Aircraft opened a new and important, huge plant dedicated on October 17, 1941 on a 200-acre site next to the Long Beach Airport. The facility cost \$12 million and employed more than thirty-thousand workers; at its peak almost 87 percent of workers were women, some of them were Black, Latinx, Asian, Indigenous, and other persons of color community members. This new plant was like a city within itself with a system of streets laid out to reduce congestion and accelerate the flow of materials and labor operations. During World War II, Douglas produced the C-47 Skytrain cargo airplanes and in corporation with Boeing, produced B-17 Flying Fortress bomber airplanes, as well as other attack and transport aircraft at this Long Beach factory.⁹⁷

Following Pearl Harbor, and as the war intensified in Europe and the Pacific, more men were being drafted into military service. This situation created a demand for a civilian military workforce, creating an opportunity for more and more women to gain employment. These

⁹⁷ Gary Richardson, “*The Federal Reserve’s Role During World War II, 1941-1945*,” Federal Reserve Bank of Richmond, Federal Reserve History, November 22, 2013, acc. Aug. 16, 2023, <https://www.federalreservehistory.org/essays/feds-role-during-wwii>; Merton J. Peck and Frederick M. Scherer, *The Weapons Acquisition Process: An Economic Analysis* (Boston, MA: Division of Research, Harvard Business School, 1962), 619; Burnett, 2011, 189-190; “City of Long Beach Historic Context Statement,” July 10, 2009, 88.

women became affectionally referred to as “Rosie the Riveter.” This was a nickname for millions of women from all walks of life across the nation who began working in wartime industries and support services — including at aircraft factories, where many had jobs on the assembly line as riveters. It is estimated that 40 percent of the workforce around the U.S. in military manufacturing activities during the war were women, with Long Beach being an important hub for these working women working. Among other tributes, in 2007 these women’s contributions to the World War II defense manufacturing efforts were recognized for posterity when the park adjacent to the former Douglas Aircraft factory was renamed “Rosie the Riveter” Park by the City of Long Beach.⁹⁸

While there were a handful of women of color in the WASP program, as noted earlier, Black women were intentionally excluded. One of the women rejected from the WASP program was Janet Bragg, the first African American woman to earn a full commercial airplane pilot’s license. She later opened the first Black-owned airport in Chicago. Another known African American woman rejected by the WASP program was Mildred Hemmons Carter, the first Black woman to become a pilot in Alabama.⁹⁹

The WASP squadron leader, Barbara Erickson (later known as Barbara Erickson London) is generally regarded as one of Long Beach’s most beloved aviators. She married Long Beach native Jack London, Jr., whom she met while both were ferrying P-38s to the East Coast and both remained active in Long Beach aviation activities. She caught the flying bug while at the University of Washington starting in 1938, later becoming an instructor there. After earning a

⁹⁸ Burnett, 2011, 194-195; Rosie The Riveter Park, Long Beach Parks, Recreation and Marina department, acc. Sept. 20, 2023, <https://www.longbeach.gov/park/park-and-facilities/directory/rosie-the-riveter-park/>.

⁹⁹ Hart, “Photo Essay - Early African American Aviators.”

commercial license, Erickson was one of the first women to become a member of the Women's Auxiliary Ferrying Squadron (WAFS) which was subsumed into the WASP in 1942. She went on to become the commanding officer of the 6th Ferrying Group, Air Transport Command stationed at the Long Beach Army Air Corps Base. Erickson was the only woman during World War II to earn an Air Medal for completing four transcontinental flights in five days of flying. She continued her aviation activities after World War II as a flight instructor and was involved with the aviation community for the remainder of her life. Erickson London's aviation endeavors provided inspiration and leadership to many and for that the Long Beach City Council in 2005 named the street near the Long Beach Airport terminal building as "Barbara Erickson London Drive" in her honor.¹⁰⁰

Another of the eighteen women pilots in the 6th Ferrying Group was Iris C. Cummings Critchell, who flew all types of military fighter and bomber airplanes. Before her interest in airplanes took flight, she was an Olympic swimmer in the 1936 Games in Berlin and attended air meets there. Born in Los Angeles, Critchell was also the U.S. women's two-hundred-meter breaststroke champion from 1936-1939. She began flying in 1939 at Mines Field (LAX) and Gardena Valley Airport. She graduated from Redondo Union High School in 1937 and went on to attend University of Southern California (USC) where she began flying instruction in her sophomore year. While developing her aviation skills in the first civil pilot training program at USC, she earned her pilot's license in 1940 and graduated with a degree in science and mathematics in 1941. After her WASP service, Critchell developed and taught the aviation

¹⁰⁰ Burnett, 2011, 214-215; Thyda Duong, "Barbara Erickson London's WWII Efforts Lead To Air Medal," *Wings Over Long Beach Aviation Expo* event (Nov. 2-3, 1996) publication, 10.

curriculum for USC's College of Aeronautics and established a similar program at Harvey Mudd College of Science & Engineering where she taught from 1962 to 1990. In her lifetime she flew fifty types of military and civilian aircraft, earned several different pilot ratings and served as an Federal Aviation Administration Pilot Examiner for more than two decades.¹⁰¹

Beginning in 1950, Critchell competed in the All-Woman Transcontinental Air Race fifteen times. She placed first in two races and was a top ten finalist seven times. Critchell has been honored by many groups for her lifetime achievements and service in aviation education and as a pilot. She was a 2015 California Aviation Hall of Fame Inductee. A member of the Ninety-Nines for many years, along with numerous other aviation and professional organizations, she continued to pilot airplanes and teach flying into her nineties. Critchell was recognized and celebrated on her 100th birthday by the Honorable Judy Chu, a Congressional representative of California as a role model for women aviators and an inspiration to us all on December 17, 2020.¹⁰²

Though the WASP program barred African American women from being part of the group, there were two Chinese American women who served in the World War II program. Margaret "Maggie" Gee, a third-generation Chinese American was born on August 1, 1923 in

¹⁰¹ "Iris Cummings Critchell," Museum of Flying, acc. Sept. 20, 2023, <https://www.museumofflying.org/california-aviation-hall-of-fame/iris-cummings-critchell/>; "Critchell, Iris Cummings," Eagle Profile, Gathering of Eagles Foundation, acc. Sept. 20, 2023, <https://www.museumofflying.org/california-aviation-hall-of-fame/iris-cummings-critchell/>.

¹⁰² "Critchell Inducted Into California Aviation Hall of Fame, Harvey Mudd College News, April 24, 2015, acc. Sept. 20, 2023, <https://www.hmc.edu/about/2015/04/24/critchell-inducted-into-california-aviation-hall-of-fame/>; Sam Gnerre, "Iris Cummings Critchell's remarkable life – so far," South Bay History, *South Bay Daily Breeze*, March 18, 2017, acc. Sept. 20, 2023, <http://blogs.dailybreeze.com/history/2017/03/18/iris-cummings-critchells-remarkable-life-so-far/>; "Celebrating Iris Cummings Critchell's 100th Birthday," *Congressional Record* – Extensions of Remarks, Hon. Judy Chu of California in the House of Representatives, Vol. 166, No. 214 (Thurs., Dec. 17, 2020), E1171, acc. Sept. 20, 2023, <https://www.congress.gov/116/crec/2020/12/17/CREC-2020-12-17-pt1-PgE1170-4.pdf>.

Berkeley, California. She dreamed of being a pilot while growing up in Berkeley as she became inspired on Sunday family trips to the Oakland Airport to watch airplanes take off and land. Gee said she saw Amelia Earhart on one of these Sundays at Oakland Airport and that they exchanged waves. She took pilot lessons when she was twenty using money she earned while working. Gee and her friends then drove to Texas to enroll in a flight school. She learned to drive a car along the way. She then applied to become a WASP and was one of 1,074 women selected for the program. Like other women in the program, one of Gee's duties was to tow targets for anti-aircraft gunnery practice while the gunners used live ammunition.¹⁰³

After the war ended, Gee went back to finish her Bachelor of Science degree and earn a Master of Science in Physics. She went to work at Lawrence Livermore National Laboratory researching weapons systems used in the Cold War. Gee was very active in community activities and Democratic Party activities locally and nationally. In 2009, at eighty-nine years old, Gee and other surviving WASP were awarded the Congressional Medals of Honor for their service from President Barack Obama.¹⁰⁴

The other Chinese American WASP was Hazel Yang Lee who was born in Portland, Oregon on August 24, 1912. She took her first airplane ride with a friend in 1932 and was inspired to join the Portland Chinese Flying Club, where she took lessons with noted aviator Al Greenwood. In October 1932 she became one of the first Chinese American women to earn a pilot's license and was accepted into the fourth WASP class, where she became the first

¹⁰³ Kimberly Brown, "Maggie Gee, Pioneering Aviator," Cal@170 by California State Library, acc. Aug. 16, 2023, <https://cal170.library.ca.gov/maggie-gee-pioneering-aviator-2/>.

¹⁰⁴ Delaney Brewer, "Margaret Gee, women Airforce Service Pilot, August 5, 1923 – February 1, 2013," National Museum of the United States Army, acc. Aug. 16, 2023, <https://www.thenmusa.org/biographies/margaret-gee/>.

Chinese American woman to fly for the U.S. Unfortunately, her WASP career was cut short when she died in a plane crash in November 1944 in Fargo, North Dakota while flying a P-63 King cobra airplane from Niagara Falls, New York to Great Falls, Montana.¹⁰⁵

Susan Ahn (later known as Susan Ahn Cuddy) was born in Los Angeles on January 16, 1915. Her parents were the first married Korean couple to migrate to the U.S. in 1902. Cuddy's parents were activists in working to liberate Korea from Japanese colonization. Her father would eventually give his life to that movement in 1938 after succumbing to injuries due to his constant imprisonment and torture by the Japanese. Cuddy graduated from San Diego State University in 1940 and joined the U.S. Navy in 1942. After the Japanese bombed Pearl Harbor, Cuddy tried to join the Women Accepted for Voluntary Emergency Service (WAVES), but was denied entry. She was accepted on her second try in 1942. She thought of her enlistment in the U.S. Navy as her way to honor her father's legacy of fighting for Korean independence and to fight against Japanese imperialism. She became an instructor on the Link Trainer flight simulators in 1943, teaching Navy aviators how to maneuver in a simulator cockpit. Later, she became the first Asian American Naval woman officer and first aerial gunnery officer, and she worked in Naval intelligence with her abilities to speak Korean. She also had assignments with: the National Security Agency; top secret projects for the Department of Defense; and running a

¹⁰⁵ "Women Airforce Service Pilot Hazel Ying Lee," The National WWII Museum, acc. Aug. 16, 2023, <https://www.nationalww2museum.org/war/articles/women-airforce-service-pilot-hazel-ying-lee>; "Pioneers of the Skies: Featuring Hazel Ying Lee (1912-1944)," Cockpit USA, acc. Sept. 27, 2023, <https://cockpitusa.com/blogs/blog/pioneers-of-the-skies-featuring-hazel-ying-lee-1912-1944-on-international-women-s-month>; Gillian Flaccus, "Chinese American WASP Losing Her Anonymity," *Los Angeles Times*, May 11, 2003, acc. Sept. 27, 2023, <https://www.latimes.com/archives/la-xpm-2003-may-11-adna-pilot11-story.html>.

think tank during the Cold War where she supervised more than three-hundred scholars and experts in Russian affairs.¹⁰⁶

The first U.S.-born Chinese American woman to earn a pilot's license was Leah Hing. She was born in Portland, Oregon in 1907, and in 1934 she earned her pilot's license. Hing took flying lessons from the legendary aerobatic pilot John Gilbert "Tex" Rankin at Pearson Field in southwestern Washington state. She performed in air shows early in her flying career. During World War II, Hing served as an instrument mechanic at the Portland Army Air Base. She died in 2001 at age ninety-four. A fleet biplane that she owned is now on display at the Pearson Air Museum, at the same location where she learned to fly.¹⁰⁷

The only Native American woman to serve as a WASP and a military pilot was Ola Mildred "Millie" Rexroat. Born to a White father and an Oglala Lakota mother in 1917, she worked for the Bureau of Indian Affairs at a reservation in Gallup, New Mexico, and the National War College in Washington, D.C. before finding her greatest passion, flying airplanes. She took flight lessons for which she paid \$8 an hour to earn her pilot's license which then enabled her to become a WASP in 1944. Rexroat was nicknamed "Sexy Rexy" by her friends, and her duties as a WASP included towing targets from her aircraft as target practice for gunnery cadets. The WASP program ended within three months of Rexroat joining. She went on

¹⁰⁶ Lora Ann Sigler, *Wartime Style – Fashion and American Culture During 20th Century Conflicts* (Jefferson, NC: McFarland and Co., 2022), 199; Paula Daniels, "Susan Ahn Cuddy Oral Histories," *CaliforniaRevealed.org*, 1996, acc. Aug. 16, 2023, <https://californiarevealed.org/do/31cb377a-8338-46d7-9eb7-18f834c56713>; Katie, Lange, "Navy Lt. Susan Ahn Cuddy Carved the Path for Asian American Women," *Department of Defense News*, April 30, 2021, acc. Aug. 16, 2023, <https://www.defense.gov/News/Feature-Stories/Story/article/2586537/navy-lt-susan-ahn-cuddy-carved-the-path-for-asian-american-women/>.

¹⁰⁷ "Asian Pacific Islander Heritage Month: Leah Hing, First Chinese-American Woman to Get a Pilot's License," *TransportationHistory.org*, May 15, 2017, acc. Aug. 16, 2023, <https://transportationhistory.org/2017/05/15/asian-american-pacific-islander-heritage-month-leah-hing-first-chinese-american-woman-to-get-a-pilots-license/>.

to serve in the Korean War and later as an air traffic controller for the Federal Aviation Administration. Rexroat passed away on June 28, 2017, at age ninety-nine. In honor of Rexroat's service and efforts in breaking barriers for women in aviation and the military, the Ellsworth Air Force Base in South Dakota named its Airfield Operations edifice, the "Millie Rexroat Building."¹⁰⁸

As with women of color who served in the WASP program, there were men of color who were not affiliated with the Tuskegee Airmen who also flew in World War II. One of these men was Angeleno Francisco D. Mercado, Jr. (b. 1920), who served in the U.S. Army Air Corps. After graduating from trade school with an interest in a career as an electrician, Mercado decided to enlist as an aviation cadet, and he completed flight training in the fall of 1942. With dual-engine advanced pilot training, he was assigned to the 491st Bomb Group which arrived in England in the spring of 1944. After more training, he flew combat missions as part of the Normandy landing operations. By the end of the summer of 1944, Mercado was flying as part of a lead crew for the 853rd Bomb Squadron. With this elite bomb squadron, he flew thirty-five combat missions during the war and was awarded the Distinguished Flying Cross. After the war, Mercado pursued a lifetime career as a journeyman electrician. He died at age eight-five in Los Angeles in 2005.¹⁰⁹

¹⁰⁸ Steck, *Teen Vogue*, Dec. 24, 2017; Jim Kent, "Ellsworth AFB Names Building for Lakota WWII Pilot," *Lakota Times*, Oct. 12, 2017, acc. Aug. 16, 2023, <https://www.lakotatimes.com/articles/ellsworth-afb-names-building-for-lakota-wwii-pilot/>.

¹⁰⁹ "National Hispanic Heritage Month: Francisco D. Mercado, Jr., U.S. Army Air Forces Pilot," *TransportationHistory.org*, acc. Aug. 16, 2023, <https://transportationhistory.org/2021/09/29/national-hispanic-heritage-month-francisco-mercado-jr-u-s-army-air-forces-pilot/#more-5903>; "Francisco D. Mercado, Jr.," *American Air Museum in Britain*, acc. Aug. 16, 2024, <https://www.americanairmuseum.com/archive/person/francisco-d-mercado>.

Corporate Anthony C. Acevedo was born in California on July 31, 1924 to undocumented immigrants. His childhood was divided between the U.S. and Mexico. After his mother's death when he was two years old, his father, an engineer, remarried and his parents were deported back to Mexico. Acevedo and his five siblings moved with their father to Durango, Mexico to keep the family together. At age seventeen Acevedo moved back to the U.S. to enroll in college. However, after the bombing of Pearl Harbor he decided to enlist in the U.S. Army. While on duty as a medic on January 6, 1945, Acevedo and his colleagues of the B 275 Infantry Regiment, 70th Infantry Division, during the Battle of the Bulge were cut off and surrounded by German soldiers. The American soldiers were marched through the snow without shoes to the camp Stalag IX-B in Bad Orb, Germany. Acevedo was targeted, believed to be a spy from Mexico rather than an American soldier. During his time as a political prisoner, Acevedo kept a diary of the torture he and his fellow political prisoners endured at the hands of their Nazi captors. Allied forces liberated Acevedo and his fellow American soldiers on April 23, 1945. After his return to the U.S., Acevedo began working as a surgical technician in Pasadena. Later he switched careers to become a design engineer and worked at North American Rockwell, McDonnell Douglas, and Hughes Aircraft. Despite the success he experienced in his new career, Acevedo struggled with his time as a Prisoner of War (POW). In 2008, after his son discovered his wartime medical records, Acevedo began speaking out about the treatment he and his fellow POWs experienced at the hands of the Nazis.¹¹⁰

¹¹⁰ Ehud Martinez, "Anthony Acevedo," Voices Oral History Center, The University of Texas at Austin, May 10, 2009, acc. Aug. 16, 2023, <https://voices.lib.utexas.edu/collections/stories/anthony-acevedo>; Richard Sandomir, "Anthony Acevedo, Who Documented His Holocaust Ordeal, Dies at 93," New York Times, March 16, 2018, acc. Aug. 16, 2023, <https://www.nytimes.com/2018/03/16/obituaries/anthony-acevedo-who-documented-his-holocaust-ordeal-dies-at-93.html>.



Fig. 63. A view of the day, October 17, 1941 ceremony marking to opening of the Douglas Aircraft plant adjacent to the Long Beach Airport. A Douglas B-19, “Guardian of the Hemisphere” bomber, the largest aircraft built up to this time, is seen in this photograph doing a fly over at the event and nearly completed new facility. The banner in the background proclaimed Long Beach’s defense plant as “Part of the Arsenal of Democracy.” Douglas workers and local residents were very proud of their contribution to the defense of democracy as World War II ground on.

Image: P_119_Arsenal_of_Demo_20x30
Historical Society of Long Beach



Fig. 64. Main entrance to the Douglas Aircraft Plant administration building, Long Beach, 1941. The one-ton, twelve-foot-tall copper globe art piece over the Lakewood Boulevard entrance to the plant became a symbol of aerospace. Company owner Donald W. Douglas and the U.S. Army Air Corps decided that the site adjacent to the Long Beach Airport would be a good place to build a new aircraft manufacturing facility for the airplanes needed to support the World War II effort in Europe and the Pacific as it was near the Los Angeles/Long Beach ports, a railroad and armed forces air bases (both Army and Navy). This new plant, provided Douglas with more manufacturing space in addition to the company's Santa Monica and El Segundo plants to meet the increased demand for the war effort aircraft.

Image: C_4420_30x24

Historical Society of Long Beach



Fig. 65. Aerial view of the Long Beach Douglas Aircraft plant, 1941. The new plant was 1.4 million square feet of assembly space and eleven buildings on parcels purchased from the Montana Land Company adjacent to Long Beach Airport. The new assembly plant construction was funded mostly by the federal government and was the first air-conditioned factory complex in the U.S. It was designed without windows so it could operate 24-hours a day during World War II blackout conditions. This new plant was like a city within itself that included a system of streets laid out to reduce congestion and to accelerate the flow of materials and labor operations.

Image: LB_plant_during_WWII_11x14
Historical Society of Long Beach



Fig. 66. A view inside the Long Beach Douglas Plant where woman and men worked side by side, ca. early 1940s. Some Black, Latinx, Asian, Indigenous, and other persons of color community members were also able to gain employment in the new aviation industry during World War II as the need for more human power increased with all the men going off to the battle fronts. Workers were crowded together in the work area with clerical staff, stockrooms, equipment rooms for tools, and other areas necessary for aircraft production.

Image: NARA_195485

Historical Society of Long Beach



Fig. 67. Photograph of women working on nose cones of an aircraft at Douglas Aircraft Company, Long Beach, 1942.

Image: DACC 5585

Historical Society of Long Beach



Fig. 68. Dora Miles and Dorothy Johnson (left to right), 1944. Long Beach Douglas Aircraft Company included some African Americans in factory floor work during World War II. This photograph and others, along with films were made for the Office of War Information and were distributed to U.S. news and other media outlets around the nation to promote patriotism and recruitment for the war effort. Although Black America's labor became needed in this era, it was not easy for them to gain employment or to find adequate housing and other accommodations due to prejudice and racist restrictive covenants on property which prohibited the renting or selling to African Americans. Even with these challenges, their successful work helped to boost Black America's economic and social condition and set the stage for a newly energized demand for equity which resulted in the various civil rights bills passed and court case wins of the 1940s to 1960s.

Image: DAC_1311

Historical Society of Long Beach



Fig. 69. Men of different nationalities, ethnicities and races working together during the World War II years in Long Beach. In 1941 President Franklin D. Roosevelt's administration issued Executive Order 8802 which banned discriminatory employment practices by federal agencies, unions and companies engaged in war-related work. The order also established the Fair Employment Practices Commission to enforce the new policy. This was mostly a symbolic act as there was no enforcement capability included for the Commission. Despite the order's weakness it was significant in that it was a big step forward to dismantling Jim Crow discrimination in the workplace as it endorsed a policy of racial equality in hiring, at least in principle, by the federal government due to activist pressure by labor leader A. Phillip Randolph and others. Credit line: California Shipbuilding Corporation.

Image: CalShip_Minorities_11x14, "Safety is a Habit at Calship." *Calship Log*, Vol. 4, No. 11 (1 Jun 1943): 29.

Historical Society of Long Beach



Fig. 70. These C-47 Skytrain airplanes for the U.S. Army Air Corps are lined up on the tarmac after being constructed by the workforce of the men and women at the Long Beach Douglas Aircraft plant, 1944. The planes would be inspected, tested, and then the Air Transport Command (Ferry Division) made up of men and women would deliver them to places around the world for the war effort.

Image: DAC_C_16887_2
Historical Society of Long Beach



Fig. 71. Women workers celebrate their accomplishment of completion of the two-thousandth C-47 Skytrain assembled at the Douglas Aircraft Company plant in Long Beach, August 20, 1943. Some of the women autographed and wrote messages on the fuselage which were rubbed off before the aircraft was delivered to the U.S. Army Air Corps. Soon this airplane model would be assigned a high priority for production by the War Production Board and more workers would be added to Douglas Aircraft's manufacturing staff.

Image: DAC P 1310

Historical Society of Long Beach



Fig. 72. Barbara Erickson (later known as Barbara Erickson London) was the commanding officer of the 6th Ferrying Group, Air Transport Command stationed at Long Beach U.S. Army Air Corps Base. After her service ended, she was a flight instructor and served as a board member for the Women's Air Derby association for many years, as well as contributing to other aviation activities in Long Beach. She became one of the most beloved aviators in the city. Erickson was the first WASP to receive the Air Medal for Meritorious Achievement as a Pilot for completing four 2,000-mile deliveries of three different types of aircraft in slightly more than five days of actual flying. The Long Beach City Council in 2005 named the street near the Long Beach Airport historic terminal building, "Barbara Erickson London Drive" in her honor.

Image: Barbara_London_14x11.jpg
Historical Society of Long Beach

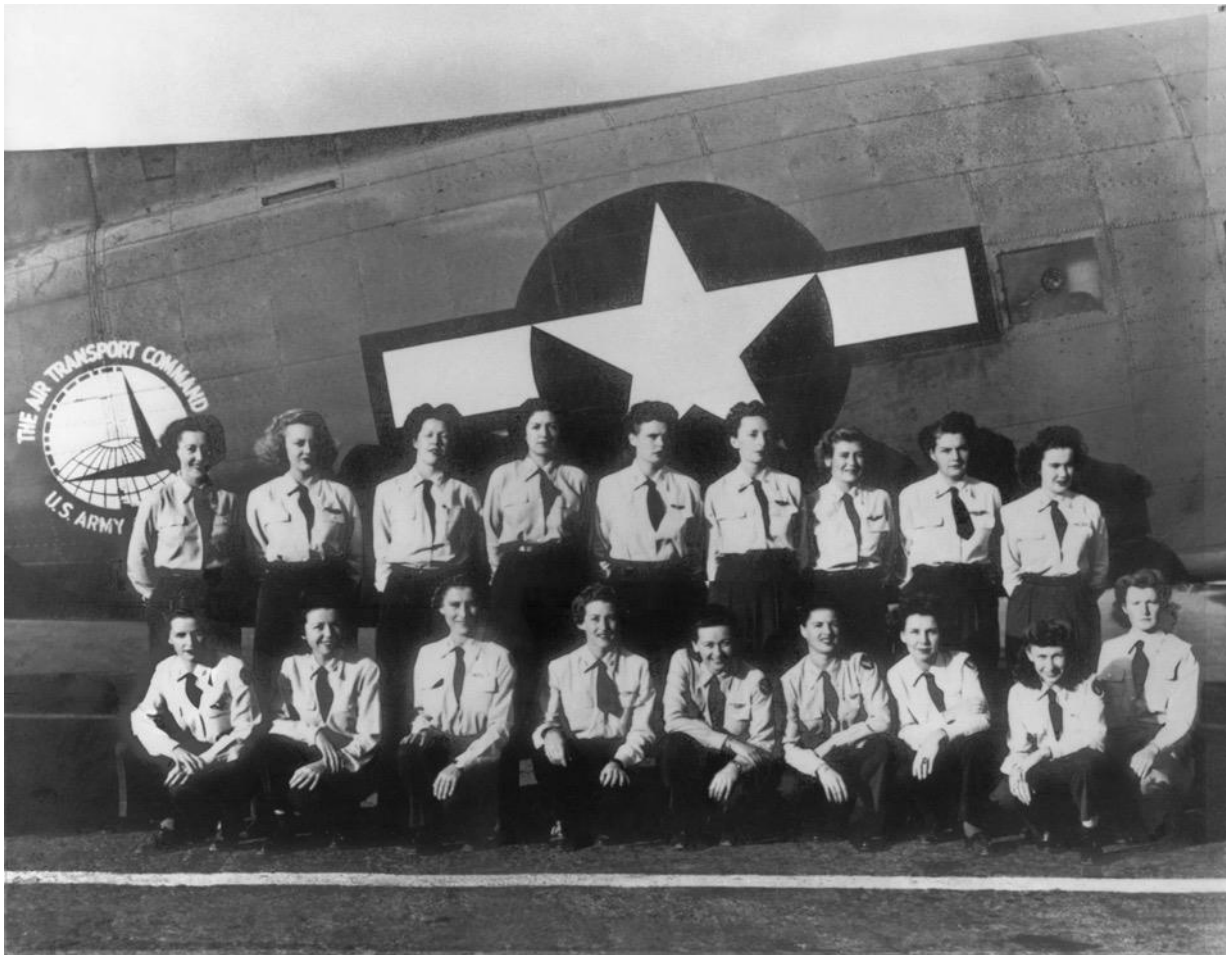


Fig. 73. Aviators of the Women's Auxiliary Service Pilots (WASP) group in front of an airplane in Long Beach, 1943. Part of the 6th Ferrying Command with the U.S. Army Air Corps Base at the Long Beach Airport, these women pilots flew many types of non-combat missions. Their primary role was delivering new airplanes to military bases and transport points throughout the U.S. These women pilots, joined military and civilian men in delivery of almost ten-thousand military aircraft produced at the local Douglas Aircraft plant. While there were a few women of color in the WASP program, African American women were intentionally excluded in this group of aviators, hence adding emphasis to the "WASP" acronym (White Anglo Saxon Protestant and the air force acronym).

Long Beach Airport Archives



Fig. 74. Iris C. Cummings Critchell was one of the eighteen women aviators who flew with the 6th Ferrying Group Air Transport Command stationed at Long Beach U.S. Army Air Corps Base from 1942- 1944. Before becoming a pilot, she was the U.S. women's 200-meter breaststroke champion from 1936-1939, and a member of the 1936 U.S. Olympics swim team in Berlin, Germany. This Southern California daughter developed her aviation skills in the first civil pilot training program at USC where she graduated with a bachelor's in science and mathematics in 1941. Critchell developed and taught an aviation curriculum for USC and established a similar program for Harvey Mudd College. In her lifetime she flew fifty types of military and civilian aircraft and earned several different pilot ratings, among other aviation accomplishments.

Long Beach Airport Archives



Fig. 75. Long Beach's Catherine "Kay" Hall Daugherty was accomplished airplane pilot in her own right. Her aviator skills are one of the legacies her late husband Earl Daugherty left her after he died in an airplane crash in 1928. In addition to running her aviation business, she was a member of the local Civil Air Patrol (CAP). In this service she earned the rank of lieutenant and executive officer. CAP flyers were involved with searching for lost airplanes, air mail service and transportation of civilian officials and injured persons.

Long Beach Airport Archives

Form ACA 904

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

THIS IS TO IDENTIFY

MARGARET (First name) (NONE) (Middle name) GEE (Last name)

who has been certificated as an airman by the Civil Aeronautics Administration and whose signature appears hereon.

Signature *Margaret Gee* U.S. GOVERNMENT PRINTING OFFICE 10-25435-1

Signature *[Signature]* Civil Aeronautics Representative

Signature *[Signature]* Fingerprinting Officer

Place of birth Berkeley, California

Date of birth August 5, 1923

Color eyes BROWN hair Black

Weight 119 lbs. Ht. 5 ft. 4 1/2 in.

FINGERPRINTS—RIGHT HAND

1 2 3 4

RIGHT THUMB

VALID UNTIL RECALLED.

This certificate is ~~now valid~~ after

Fig. 76. Margaret “Maggie” Gee’s identification card issued by the Department of Commerce Civil Aeronautics Administration with finger prints from her right hand, ca. early 1940s. Of Chinese descent, she was one of the two Asian American women who became a WASP during World War II. She later went on to be a scientist at Lawrence Livermore National Laboratory in the San Francisco Bay area where she did research on weapons systems used in the Cold War. Gee and all the other still living WASP pilots in 2009 were awarded the Congressional Medals of Honor for their service from President Barack Obama.

Image: 2016.004.002, <https://www.mocanyc.org/collections/stories/maggie-gees-airman-id-card-and-honorable-discharge-certificate/>

Courtesy of Marissa Moss, in Memory of Maggie Gee, Museum of Chinese in America (MOCA) Collection



Fig. 77. Navy Lieutenant Susan Ahn (later known as Susan Ann Cuddy) joined the service after Japan bombed Pearl Harbor in 1942. She was the first Asian American woman Naval officer and first aerial gunnery officer. She went on to work for Naval intelligence using her abilities to speak Korean. Graduating from San Diego State University in 1940, her academic credentials with her Korean language skills helped her to get assignments on National Security Agency and Department of Defense projects.

Image: <https://www.defense.gov/News/Feature-Stories/Story/article/2586537/navy-lt-susan-ahn-cuddy-carved-the-path-for-asian-american-women/>
Courtesy of U.S. Department of Defense



Fig. 78. First Lieutenant Francisco D. Mercado, Jr., a Mexican American of immigrant parents, served in the U.S. Army Air Corps during World War II and received the Distinguished Flying Cross. He also became a member of the exclusive "Caterpillar Club" having saved his life by parachuting on July 21, 1944 over Great Britain while returning from a mission with a crippled B-24. Pictured here in 1942 is Mercado at Minter Field in Bakersfield, CA where he first flew the BT-13A bomber.

Image: https://en.wikipedia.org/wiki/File:Francisco_Mercado_in_BT-13A_1942.jpg#filelinks
Courtesy of U.S. Army Air Corp

As was illuminated earlier, the great majority of pilots of color who flew combat missions in World War II were members of the Tuskegee Airmen. The same year that the Tuskegee Airmen 99th Fighter Squadron was sent into action in March 1941, President Roosevelt issued Executive Order 8802 in June 1941. This executive order banned discriminatory employment practices by federal agencies and unions and companies engaged in war-related work. The order also established the Fair Employment Practices Commission to enforce the new policy. Working with Eleanor Roosevelt to make this executive order a reality was: A. Philip Randolph, president of the Brotherhood of Sleeping Car Porters; other Black leaders, including California Assemblymen August “Gus” Hawkins; and influential scholars. Randolph’s list of grievances coupled with a threat to bring thousands of Black people to Washington D.C. and onto the White House lawn if their demands were not met helped sway President Roosevelt. Plus, by 1940 Roosevelt had won two-thirds of the Black vote. This contrasted to his first campaign in 1932 where Black Americans voted 2-1 in favor of Roosevelt’s Republican opponent Herbert Hoover. By the 1934 mid-terms, the Black vote turned decisively toward the Democrats, as African Americans migrated North and West and formed an important voting bloc. Black Americans began to more openly question which party was serving their needs and demands for equality and equity.¹¹¹

The practice of race, religious and national origin discrimination in key defense industries with government contracts and labor unions continued in Southern California and

¹¹¹ Jennifer Schuessler, “At the Roosevelt Library, an Unflinching Look at Race,” *New York Times*, Aug. 1, 2023, acc. Aug. 30, 2023, <https://www.nytimes.com/2023/08/01/arts/fdr-library.html>; Alison Rose Jefferson, “Leisure’s Race, Power and Place: The Recreation and Remembrance of African Americans in the California Dream” (PhD diss, University of California, Santa Barbara, 2015), 379.

across the nation, notwithstanding Executive Order 8802, which was a mostly symbolic act as it included no enforcement capability. Despite the order's weakness it was a significant in that it was a big step forward to dismantling Jim Crow discrimination in the workplace because it endorsed a policy of racial equality in hiring, at least in principle, by the federal government due to activist pressure. The military itself remained segregated however, and discrimination blatantly continued in job placements. Black American veterans also were effectively shut out of many postwar benefits, including housing. In 1948, President Harry S. Truman signed Executive Order 9981, which called for the desegregation of the U.S. armed forces. In 1949, the newly established U.S. Air Force became the first armed services to carry out the order. The mandate of integration of the armed forces was a crucial event which was not fully implemented until 1953 and the process had a ripple effect that led to more African Americans participating in the fight for full equity in American society. Perhaps the early Black aviation pioneers, like Bessie Coleman, William J. Powell, and James Herman Banning, were correct in thinking that equality in the air would bring equality on the ground as well.¹¹²

World War II was bookended by Executive Order 8802 in 1941 and Executive Order 9981 in 1948. Both policies were geared to creating opportunities for people of color in American society. The war led to the growth of the aviation and defense industries and the expansion of the military. There was a need for more than White males in the defense and military industrial complex in order to win the war, thus "Rosie the Riveter" and the "Red Tails" became important in fulfillment of the human power needed at time of a labor shortage. The aircraft and other equipment and materials needed to fight a war from the air on two fronts was

¹¹² Jefferson, 2015, 377-379; Hart, *Flying Free: America's First Black Aviators*, 1992, 55.

manufactured in plants such as Douglas Aircraft Company in Long Beach. As an example, this plant built a total of three-thousand B-17 Flying Fortresses, completing the last one on July 12, 1945. The Red Tails often escorted the B-17 bomber on its missions. The Black vote and the threat of mass demonstrations led to Order 8802 while the success of the Tuskegee Airmen and Black troops on the ground and the need for more military bodies for combat helped facilitate Order 9981.

One of the earliest known African American pioneering engineers who became a key contributor during World War II and beyond was Joseph S. Dunning (1916-1991). Born to West Indian immigrants in Milton, Massachusetts, Dunning earned a bachelor's degree in aeronautical/astronautical engineering in 1937 from the Massachusetts Institute of Technology (MIT). He was one of only nine African American students attending MIT in the 1930s. He also earned advanced degrees at Harvard University and Stanford University, becoming the first African American aeronautical engineer in the U.S. The *California Eagle* newspaper announced in a front page headline, "Douglas Aircraft Has Negro Expert," with a subheading and article text that noted Joseph Dunning's employment was the first known move by an aircraft manufacturer to recognize qualified Negroes with this type of employment. As Dunning's accomplishment was celebrated, this article went on to discuss the "rigid job discrimination" in the majority of the airplane and other armaments industries, being fought against by African American groups, was likely to continue to keep Black Americans from equal employment participation in these billion dollar industries for the near future.¹¹³

¹¹³ "Joseph S. Dunning 1937," MIT Black History,, acc. Sept. 20, 2023, <https://www.blackhistory.mit.edu/archive/joseph-s-dunning-1937>; E. Renee Ingram, "Dunning, Joseph Samuel,"

A July 1940 article about Dunning in the NAACP publication *The Crisis*, observed, “... one colored man, an aeronautical engineer, and graduate of MIT in Boston and Stanford University in Palo Alto, California, had been accepted as a ‘probationary employee’ by the Douglas Aircraft Company in Los Angeles ... at least his initial efforts have not been rebuffed as in the past. However, there is as yet no indication that the vast national defense program of the United States will include the Negro as employees in factories, mechanics and helpers in the huge ground crews for airplanes, or by enlistment in all the branches of the armed forces.” *The Crisis* writer, joined the *California Eagle* writer, in facing the facts of the discrimination which had been occurring and was pessimistically celebrating Dunning’s accomplishment as well as the limited progress made in new aerospace employment for African Americans. During the next few decades, especially after the 1960s civil rights legislation with enforcement capabilities was instituted to push for equity in U.S. society, African Americans and other Americans who had been marginalized would gain a few opportunities for work in a broader array of aviation, defense, aerospace and related industries jobs, beyond lower-level maintenance or menial jobs.¹¹⁴

In 1940 Dunning began his career with the Douglas Aircraft Company (now a part of The Boeing Company) in Los Angeles and Long Beach when Black Americans were fighting for employment opportunities in the new aviation industries before Executive Orders 8802 and 9811 discussed earlier were implemented. During his career as the first Black aeronautical

Engineer, 1929-1940: The Great Depression and the New Deal, Oxford African American Studies Center, acc. Oct. 1, 2023, https://oxfordaasc.com/browse?t=AASC_Occupations%3A1006&t0=AASC_Eras%3A8; “Douglas Aircraft Has Negro Expert,” *California Eagle*, May 30, 1940, 1.

¹¹⁴ “Meet Joseph S. Dunning,” *The Crisis*, Vol. 47, Iss. 7, July 7, 1940, 199, acc. Sept. 20, 2023, https://archive.org/details/sim_crisis_1940-07_47_7/mode/2up?view=theater&ui=embed&wrapper=false; Burnett, 2021, 216-217, 279-280.

engineer, Dunning contributed to the development the world renowned DC aircraft lines, including the DC-3 to DC-10, and worked on the company's supersonic transport program. By his retirement in 1979, Dunning was Vice President of Administration, the first Black vice president of a major U.S. aerospace company. Outside of his employment, Dunning served the greater Long Beach and Los Angeles communities in several capacities. He was an active executive member of the NAACP for most of his working career. He served on the board of directors of Long Beach Community Hospital and United Way, was a member of the White House Conference on Youth, and served as president of the Los Angeles Urban League. Los Angeles Mayor Tom Bradley appointed Dunning to the transit board in 1987. Dunning's career in the aviation industry inspired many in his life, including his son, Gilmore J. Dunning, who became an engineer and worked Hughes Research Labs in Malibu, California.¹¹⁵

After World War II, Black Americans found increased opportunities for making military aviation a career during the Korean War in the early 1950s and the Vietnam War in the 1960s. Lieutenant William E. Brown flew 125 combat missions in the Korean War and 100 missions in Southeast Asia during the Vietnam War. His military career saw him eventually promoted to Major General. Ensign Jesse L. Brown was the first Black Naval aviator. While flying a close air support mission in the Korean War, Brown's plane was struck by fire from an enemy aircraft. A fellow pilot, Lieutenant Thomas J. Hudner made a dangerous landing in mountainous terrain and under severe weather conditions to free Brown from the wreckage of his aircraft, but the

¹¹⁵ "Services Set for Joseph Dunning; Retired Aerospace Executive," *Los Angeles Times*, Feb. 3, 1991, acc. Sept. 28, 2023, <https://www.latimes.com/archives/la-xpm-1991-02-03-mn-773-story.html>; Ingram, "Dunning, Joseph Samuel,"; Patricia McGinnis (Douglas archivist, The Boeing Company), in discussion about Black, Latinx, Asian, Indigenous, and other persons of color employees historical data via emails and virtual meeting with authors Alison Rose Jefferson and Philip S. Hart, and Long Beach Airport public affairs officer Kate Kuykendall, April–May 2023.

rescue attempt was not successful. Brown was posthumously awarded the Distinguished Flying Cross. Brown's story is told in the Sony Pictures motion picture *Devotion* which was released in 2022.¹¹⁶

Air Force General Daniel "Chappie" James, Jr. (1920-1978) was the first Black American four-star general in his service and in any U.S. military branch. A combat veteran of the Korean and Vietnam Wars, James flew many wartime missions and held a variety of leadership positions during the course of his career. In Vietnam he flew seventy-eight combat missions when assigned to the 8th Tactical Fighter Wing, where he mainly flew in McDonnell-Douglas F-4C Phantom jets. In 1975 General James was named Commander-in-Chief of the North American Air Defense Command, where he was awarded his fourth star. Frank E. Petersen, Jr., was also a combat veteran of both the Korean and Vietnam War. In 1968, Petersen became the first Black officer to command a squadron in either the U.S. Navy or Marine Corps. He later advanced to the rank of Brigadier General. Both General James and Brigadier General Petersen are featured in the 2012 Smithsonian Channel documentary film *Black Wings*, which is based upon Von Hardesty's book of the same title.¹¹⁷

As noted earlier, Benjamin O. Davis, Jr. played an important leadership role with the Tuskegee Airmen. Davis graduated from West Point in 1936, where he was the lone African American cadet and experienced four years of silent treatment from his fellow cadets as a form of discrimination and hazing that dictated no one speak to him. During World War II, he earned

¹¹⁶ Hardesty and Pisano, 1983, 61-62; *Devotion*, directed by J.D. Dillard (Culver City, CA: Sony Pictures, 2022), was based upon the book *Devotion: An epic Story of Heroism, Friendship and Sacrifice* (New York, NY: Ballantine Books, 2017) by Adam Makos; Hardesty, *Black Wings*, 120, 130.

¹¹⁷ *Black Wings*, produced by Dan Wolf and Philip S. Hart (Washington, DC: Smithsonian Channel, 2012); Hardesty, *Black Wings*, 2008, 152-157; Hardesty and Pisano, 1983; 64.

the Distinguished Flying Cross and the Silver Star for gallantry in a bombarding attack on an enemy airfield in Germany. Davis became the first Black general in the U.S. Air Force in 1954. The Department of the Air Force as a separate U.S. armed services division came into being with the National Security Act on September 18, 1947. Davis also served in the Korean War as Commander of the 51st Fighter Interceptor Wing, Far East Air Forces. Davis retired from the military in 1970.¹¹⁸

Military aviation in World War II became an avenue through which some Black Americans were able to participate in general aviation and enter the blossoming aeronautical sector. Black participation in general aviation after World War II continued to be limited by high costs for aviation training as well as racism. Despite these limitations, African Americans successfully took part in general aviation activities as diverse as sport aviation, aircraft design, small airport operation, aviation engineering, and mechanical repair. John W. Greene, Jr. was one of the aviators active in the general aviation realm. Greene received his private pilot's license in June 1929. In his career he also helped establish an airport at Croom, Maryland. Neal Loving overcame racial barriers and a physical disability to become a pilot and designer of experimental aircraft. Loving's single-seat midget-class aircraft, the WR-1 Love, has been on display at the Experimental Aircraft Association Museum in Hales Corner, Wisconsin. In 1954 Loving flew his WR-1 from Detroit, Michigan to Cuba and Jamaica, a distance of 2,200 miles.¹¹⁹

These two outstanding pilots indicate the importance of general aviation even as commercial aviation has been in the mix of the activities at airports like Long Beach Airport.

¹¹⁸ Hardesty and Pisano, 1983, 66.

¹¹⁹ Hardesty and Pisano, 1983, 70-73.

Since its formation in 1923 general aviation at Long Beach Airport has played an important role beginning with flight schools and evolving over the years to other activities such as charter, cargo and medical flights among other activities. Black, Latinx, Asian, Indigenous, other persons of color, and women aviators have also been part of the Long Beach Airport general aviation community.¹²⁰

With few exceptions, African Americans were unknown to commercial aviation outside of lower-level services jobs as skycaps and ground handlers in the post-World War II years. They were excluded from being pilots or holding key administrative positions. Perry H. Young (1919-1998) was one of those exceptions. Encouraged by Cornelius Coffey and Willa Brown, Young learned to fly in the 1930s. He worked as a flight instructor both at the Coffey School of Aeronautics in Chicago and at Tuskegee Army Air Field during World War II. After the war because he could not overcome discrimination in the U.S., he found work in the Caribbean. In 1956, Young was finally hired as a helicopter pilot by New York Airways. James O. Plinton, Jr. (1914-1996), was one of the first African American flight instructors at Tuskegee Army Air Field. After helping to organize Andesa, the national airlines of Ecuador and Haitian International Airlines, Plinton also overcame racism to finally become an airline executive at TWA where he held positions in the mid-1960s, thus becoming one of the first Black pilots to be employed by a major airline.¹²¹

¹²⁰ Christopher A. Hart, pilot and former Chairman of the U.S. National Transportation Safety Board (2014-2017); Adam Hart, engineering executive at Gulfstream Aerospace (2015-present); and several BPOC pilots whose use many airports in the nation for general aviation purposes, including Long Beach Municipal Airport in discussion with co-author Philip S. Hart, 2023; Hardesty and Pisano, 1983, 70.

¹²¹ Hart, *Flying Free: America's First Black Aviators*, 1992, 56; Alex Calta, "The Long Career of Perry Young," National Air and Space Museum, Feb.5, 2017, acc. Oct. 1, 2023, <https://airandspace.si.edu/stories/editorial/long-career-perry-young>; Agis Salpukas, "James Plinton Jr., 81; broke Color Barriers at U.S. Airlines," *New York Times*,

In 1965, Marlon D. Green (1929-2009) won a long court battle with Continental Airlines over his right to a job as a commercial pilot. As a result of this important case, African Americans began to make significant gains toward breaking down racial barriers in the commercial airline industry. One beneficiary of this legal outcome helped David E. Harris (1934-present). Captain Harris became one of the first African American pilots to be employed by a major airline when he joined American Airlines in the mid-1960s. Both Green and Harris flew in and out of Long Beach Airport in their careers as commercial airline pilots.¹²²

July 14, 1996, acc. Oct. 1, 2023, <https://www.nytimes.com/1996/07/14/us/james-plinton-jr-81-broke-color-barriers-at-us-airlines.html>.

¹²² Hardesty and Pisano, 1983, 75; Amanda Laughead, "Fighting for the Right to Fly: Marlon D. Green," National Air and Space Museum, Feb. 22, 2023, acc. Oct. 1, 2023, <https://airandspace.si.edu/stories/editorial/marlon-green>; Robert Fikes, "David Ellsworth Harris (1934-)," BlackPast.org, Oct. 29, 2017, acc. Oct. 1, 2023, <https://www.blackpast.org/african-american-history/harris-david-ellsworth-1934/>.



Fig. 79. The July 1940 issue of *The Crisis* Magazine published by the National Association for the Advancement of Colored People (NAACP) cover headline read, “For Whites Only.” The cover story celebrated that a well-educated aeronautical engineer, Joseph S. Dunning, gained “probationary employment” at Douglas Aircraft in Los Angeles as it described the discrimination occurring at the time. During the next few decades especially after the 1960s civil rights legislation with enforcement capabilities was instituted to push for equity in U.S. society, African Americans and other marginalized Americans would gain more opportunities for work in a broader array of aviation, defense and related industries employment, beyond lower-level maintenance jobs.

Image: https://archive.org/details/sim_crisis_1940-07_47_7/mode/2up?view=theater&ui=embed&wrapper=false



Fig. 80. Joseph S. Dunning's class of 1937 photograph when he graduated from Massachusetts Institute of Technology (MIT) with a bachelor's degree in aeronautic/astronautical engineering. He also earned advanced degrees at Harvard University and Stanford University, and is considered to be the first Black aeronautical engineer in the U.S. He began his career at Douglas Aircraft Company in 1940 at the same time when many other African Americans were denied opportunities for work in aviation, defense and related industries jobs, beyond lower-level maintenance or menial jobs.

Image: <https://www.blackhistory.mit.edu/archive/joseph-s-dunning-1937>
Courtesy of MIT Museum



Fig. 81. Founding members of the Long Beach branch of the National Association for the Advancement of Colored People (NAACP): Ernest McBride, Sr., Lillian McBride, Lillian Colhn, Annabelle Cheatham, Ernestine Cheatham, Hilden Anderson and Percy Anderson, ca. 1948-1950. With the social structure of Black America more urbanized in Southern cities, the North, and the West, a period of high employment and wages, and rapid unionization during the 1940s there was greater participation in the NAACP with a focuses on political mobilization and economic concerns. One of this group's first successful fights was to get Black-faced minstrel shows that demeaned Black people eliminated from the Long Beach School District classrooms. The group was very active in work to open broader private and public employment as well as housing opportunities for African Americans living in Long Beach in the 1940s-1950s.

Image: <https://lbpl.contentdm.oclc.org/digital/collection/p17164coll3/id/6540/rec/1>
Long Beach Public Library



AIRCRAFT CLASS ROOM INSTRUCTION—JEFFERSON HIGH SCHOOL—LIEUT. WILLIAM J. POWELL, INSTRUCTOR

Fig. 82. Craftsmen of Black Wings was a program at Jefferson High School to teach youths how to build, repair, and pilot aircraft, ca. 1930s. The program was founded by William J. Powell, and his goal was to train and provide scholarships to students as part of his efforts of promoting aviation in the African American community.

Image: <https://digital.library.ucla.edu/catalog/ark:/21198/z1xd2jtj>
Miriam Matthews Photograph Collection, OpenUCLA Collections

From Flying Airplanes to Flying into Space and Other Aeronautic Technological Innovations (1950s and Beyond)

The 1940s-1960s gave rise to a whole new arena of human flight with the advancements in commercial as well as military aircraft design and the advent of rocketry and spacecraft travel. New commercial aircrafts were developed that could go longer distances and carry more passengers. Space exploration began to be considered in the late 1940s with Boeing, Douglas, McDonnell, and North American Aviation having significant involvement in guided missile development programs. All these companies had anticipation for the evolving technologies to be adapted for human travel into space. Douglas engineers came up with the first practical application for space travel in 1946 and became the initial leaders in space exploration and developing the rockets to get a flying vehicle into space. The U.S. became engaged in a “Space Race” with the Soviet Union to see who could get people into space first. This flying revolution and competition became more intense with the launch of Sputnik by the Soviet Union in October 1957, which included cosmonaut Valentina Tereshkova, the first woman in space and the only one to fly solo in space. In California in this era, Shojun “Yuk” Yukawa, John Quincy Tabor, Jr., and Leonard “Nayo” Colacion created opportunities for themselves in aircraft technological advancement and in these new aerospace and related industries.¹²³

One of the few Japanese Americans involved with the aviation industries in production of aircraft research and equipment in the 1960s was flight test engineer Yukawa. He was a member of the four man crew that took off from Long Beach Airport in 1970 in the maiden

¹²³ Yenne, 2005, 161.

flight of the prototype DC-10 aircraft produced by the Douglas Aircraft Company division of the newly merged McDonnell Douglas Corporation. Yukawa and Joseph Dunning may have interacted together on projects during this time as both worked on DC aircraft development. The DC-10 was one of the early trijet wide-body aircraft for long-range flights which could hold 270 passengers. Yukawa, a Nisei Japanese American was born in Tacoma, Washington in 1930 to immigrant parents from Japan. At twenty-one years old he enlisted in the U.S. Army around 1951, and his Japanese language fluency aided him in getting a job in the intelligence group where he was assigned to work in Japan. Yukawa had already decided he wanted to get into the aviation, but he did not have the opportunity while in the U.S. Army. After his military service discharge, Yukawa went to the University of Michigan where he earned a Bachelor of Science degree in aeronautical engineering. Yukawa arrived at Douglas in 1964, before the merger with McDonnell in 1967 after working for North American Aviation as a flight test engineer and Lockheed's Special Projects Group as a dynamicist.¹²⁴

Yukawa first worked on the DC-8 and DC-9 programs as a flight development engineer at Douglas. He was responsible for test procedures and test equipment supervision for these programs, which set the stage for his same job on the DC-10 flight test program. Yukawa also worked on the team to help Douglas sell aircraft to Japan. The DC-10 was not only the test of an advance technology aircraft, it was as well a test of an advanced technology in flight testing systems and processes. Yukawa monitored the airplane test program equipment on board that sent back signals to the automated flight test control center. The equipment in the aircraft and on the ground at the control center included computers, cameras and on-board electronic

¹²⁴ Ingells, 1979, 194-197.

monitors, and ground tracking stations that could give results of various tests in hours on the ground at the new Data Acquisition Center. As part of the complete DC-10 test program, this airplane was the first to have to go through trials for a noise certification to meet the new regulations that set noise standards for all new types of sub-sonic aircraft in order to receive Federal Aviation Administration (FAA) approval for airworthiness. The DC-10 participated in the first set of noise certification test measurements ever taken by the National Aviation Facilities Experimental Center (NAFEC) for the FAA. Yukara contributed to this DC-10 aircraft's advanced technology program, which was viewed with a tremendous hope for solving the environmental noise problems caused by commercial airplanes at that time and for the future. The DC-10 airplanes are still flying in 2023 mostly for cargo transportation and firefighting use (converted to hold water and fire retardant chemicals).¹²⁵

A first-generation born African American Californian of parents who migrated to the Los Angeles' Venice community from Louisiana in the 1910s, young John Quincy Tabor, Jr. (1921-2018) thought he wanted to be a doctor. After graduating from Venice High School, he attended college at what was then called Santa Monica Junior College, La Sierra College and University of Southern California for several years in the 1940s. During those college years he became employed as the first African American lifeguard in Los Angeles County to work the beaches. From the 1940s-1960s he was in the U.S. Coast Guard Temporary Reserves and Auxiliary. By 1947 Tabor decided that instead of pursuing medical school he would apply for a

¹²⁵ Ingells, 1979, 194-203; Ron Beeler, ed., "DC-10 Flight Memories Burn Brightly Even after Half a Century," *Roundup: DAC-MDC-Boeing Retirees of California*, No. 197 (Sept. 2020), no page numbers, acc. Sept. 25, 2023, <http://www.macdacwestretirees.org/common/documents/newsletter/September%20%20Round%20Up%202020%20Final.pdf>.

civilian chemist position with the U.S. Navy Ordinance Test Station in Inyo Kern, California. There he developed tests for propellants used in solid rocket missiles that were deployed in the Korean War. Tabor also did chemical testing of explosives that caused the critical mass to detonate the Navy's version of an atomic bomb; this project was later abandoned by the Navy. From there he went on to another civilian chemist job for the California's Mugu Naval Air Missile Test Center in Ventura County to develop a missile tracking flare and the smoke for tracking drone aircraft which was used in air shows by the Navy's Blue Angels flight demonstration squadron.¹²⁶

Tabor would go on to work in the private sector in small and large companies on pyrotechnic devices and fuel development as well as in rocket development for the remainder of his defense industries career. He would register a few patents on products he designed. By the late 1950s into the early 1960s, Tabor was in Goleta and Hollister, California heading up pyrotechnic development at Aerophysics Development Corp., still working on tracking flares and destruct systems and later for these types of products, acting as a sales manager at Horex. Aerojet (now Aerojet Rocketdyne, a division of GenCorp.) was his next stop for work to develop igniters for motors used for U.S. missiles for the Aerobee Hi rocket, a small unguided suborbital sounding rockets (capable of climbing up to 130 nautical miles) used by high atmospheric and cosmic radiation research which were launched from Fort Churchill, Nevada. From 1964-1967 in his last job in aerospace, Tabor worked at Douglas Aircraft in Huntington Beach as one of the engineering team managers who developed the auxiliary propulsion engines on the Saturn S5V

¹²⁶ John Q. Tabor, Jr., Las Vegas, NV resident, Interview by Allyson Tabor, April 25, 2011, Las Vegas, Nevada (copy in possession of co-author Alison Rose Jefferson).

lunar orbiter, the fourth stage in the NASA Apollo program to put a human on the moon. He also developed a two-plant igniter and destruct systems that later became the Patriot Missile.¹²⁷

In 1967 there was a reprioritization of the aviation, aerospace and military defense related industries priorities that ended the Apollo-Saturn space program era. Additionally a nationwide recession impacted the aircraft industry due to commercial airlines dealing with rising fuel expenses and a decrease in passengers. The newly merged McDonnell Douglas Corporation also reorganized its business lines as it laid off thousands of employees. Tabor was one of those laid off employees. He went on to become a sporting goods supply business owner for forty years. In the 1970s-1980s McDonnell Douglas, as a smaller company with less of a footprint in Southern California, became a key producer of missiles and space hardware, along with continuing to sell commercial jetliners and their military derivatives.¹²⁸

Like Yukama and Tabor, Leonard “Nayo” Colacion (1931-2000) was a first-generation American-born citizen and Californian who lived during World War II and the Korean War. He was born in the Watts community to parents who had immigrated to Los Angeles from Mexico in the early 1920s. Colacion graduated from David Starr Jordan High School and served in the U.S. Army 2nd Infantry Division in Korea. After his military service he came home and went on to college. He earned an associate’s degree at Compton College and a Bachelor of Science in electrical engineering from University of California, Los Angeles (UCLA) in 1959. Concerned he

¹²⁷ John Q. Tabor, Jr., Las Vegas, NV resident, Interview by Allyson Tabor, April 25, 2011, Las Vegas, Nevada (copy in possession of author Alison Rose Jefferson).

¹²⁸ *A Brief History of the Boeing Company*, 66-69; John Q. Tabor, Jr., Las Vegas, NV resident, Interview by Allyson Tabor, April 25, 2011, Las Vegas, Nevada (copy in possession of author Alison Rose Jefferson).

might not get security clearance for employment in aerospace due to small tattoos he had obtained on his forearms in the military, Colacion's credentials and expertise prevailed. He would go on to work for most of his thirty-five year career in aerospace research at Rockwell International on many projects including the Apollo space program in the 1960s in Downey, California. While working in Downey, Colacion would have had work experiences with African American engineers who also contributed to the Apollo mission, including Charles Cheatham (he also worked on the NASA Space Shuttle program), Roland Beanum, Shelby Jacobs, Nate LaVert, and Howard T. Greene, along with a few other Black, Latinx, Asian, Indigenous, and other persons of color community members and women. Some of their work is on display at Downey's Columbia Memorial Space Center offering inspiration "to ignite a community of critical and creative thinkers."¹²⁹

Colacion later worked in Seal Beach, California for Rockwell on satellite development such as the experimental spacecraft P80-1 that carried an infrared telescope code named "Teal Ruby." It was an early warning sensor intended to: detect enemy aircraft crossing the polar region towards the U.S. during the Cold War; conduct ocean surveillance to target ships; provide missile launch warning; detect other satellites; and see major events on the Earth's surface. The Teal Ruby, along with other experiments was to have been launched on a space shuttle in the 1980s, but the U.S. Air Force and the Defense Advanced Research Projects Agency

¹²⁹ "Colacion, Leonard 'Nayo'," Obituaries, *Los Angeles Times*, April 1, 2000, B12; Michael Colacion, Son of Leonard Colacion and Long Beach, CA resident, Interview by Alison Rose Jefferson, Sept. 19, 2023, via telephone, Los Angeles, CA; Eric Pierce, "Downey celebrates relocation of space shuttle mock-up," *The Downey Patriot*, July 19, 2012, acc. Sept. 27, 2023, <https://www.thedowneypatriot.com/articles/downey-celebrates-relocation-of-space-shuttle-mock-up>; Joanne Higgins, Executive producer and host of *Other Moon Shot* podcast, Laist Studios (debut early 2024), Interviewed by Alison Rose Jefferson, August 2023, Los Angeles, CA; Columbia Memorial Space Center, City of Downey website, acc. Sept. 27, 2023, <https://www.columbiaspacescience.org>.

(DARPA) canceled the project due to its high costs and technological problems, along with other issues after the Space Shuttle *Challenger* accident in 1986. Technology used in digital cameras allowing for them to continuously capture image of large areas for long periods of time, is one of the outgrowths of the Teal Ruby project that society has benefited from. Around the time Colacion retired in 1996, Rockwell International as the company was called by then, sold its aerospace and defense divisions to The Boeing Company to focus on its operations in industrial automation, avionics and communications, and electronic commerce.¹³⁰

From equipment production and testing to the astronaut side of space flight, Dr. Vance H. Marchbanks, Jr. (1905-1988), a U.S. Air Force flight surgeon and former member of the 332nd Fighter Group, worked with NASA in the 1960s. When John Glenn, the first American astronaut to orbit the Earth, went into space in February 1962, Marchbanks served on Glenn's mission control team. Captain Edward J. Dwight, Jr. (1933-present), the first Black astronaut candidate, was nominated for space flight in 1963. As an Air Force test pilot at Edwards Air Force Base, Dwight was passed over when the astronaut selections were made, however, and charges of racial discrimination were raised with his dismissal.¹³¹

¹³⁰ Michael Colacion, Son of Leonard Colacion and Long Beach, CA resident, Interview by Alison Rose Jefferson, Sept. 19, 2023, via telephone in Los Angeles; "Teal Ruby," National Museum of the United States Air Force, acc. Sept. 26, 2023, <https://www.nationalmuseum.af.mil/Visit/Museum-Exhibits/Fact-Sheets/Display/Article/589823/teal-ruby/>; *A Brief History of The Boeing Company History*, 74; Yenne, 2005, 9; "History of Rockwell International Corporation," Referenceforbusiness.com, acc. Sept 26, 2023, <https://www.referenceforbusiness.com/history2/71/Rockwell-International-Corporation.html>.

¹³¹ Hart, *Flying Free: America's First Black Aviators*, 1992, 57. Edward J. Dwight has gone on to become a leading sculptor working out of his studio in Denver, Colorado, Ed Dwight, sculptor and historian, <https://eddwright.com/>; Dwight is featured in the upcoming documentary film, *The History of Black Astronauts* directed by Lisa Cortes and Diego Hurtado de Mendoza for National Geographic Documentary Films that will debut on Disney+ in Feb. 2024, <https://www.becauseofthemwecan.com/blogs/news/the-history-of-black-astronauts-is-highlighted-in-new-trailer-for-the-space-race-documentary>.

As this new era of human flight evolved and U.S. Air Force pilots like Edward Dwight and Robert Lawrence were considered as possible astronauts, it was Guion “Guy” Bluford (1942-present) who became the first African American to participate fully as a member of the NASA astronaut corps. Bluford grew up in Philadelphia where his father was a mechanical engineer. At an early age he demonstrated an interest in aeronautics, building model aircraft, and dreamed of a career in aviation. After earning his undergraduate degree in aerospace engineering from Pennsylvania State University in 1964, Bluford joined the U.S. Air Force where he became a fighter pilot. He was deployed to Vietnam with the 557th Tactical Fighter Squadron, and his tour of duty involved a total of 144 air combat missions, including ten over North Vietnam. With a stellar military and flying career and academic credentials, Bluford was able to join the NASA space program in 1978. In 1983 he became the first African American astronaut as a mission specialist on the *Challenger* space shuttle flight. Bluford flew three more space shuttle flights with his last space mission taking place in 1993.¹³²

Other Black astronaut pioneers included Frederick D. Gregory, who like Bluford, joined the NASA space program in 1978 as one of his classmates. Gregory was a 1964 graduate of the U.S. Air Force Academy and a veteran of the Vietnam War. By the time Gregory was selected for the NASA astronaut program he had logged nearly seven-thousand hours flying in fifty different aircraft types. He was on several missions to space, the first being in 1985 when he served as pilot on the *Orbiter Challenger* on a mission that included a series of scientific experiments. The second Black astronaut, Ronald F. McNair, gave his life in one of the most tragic episodes in the history of the space age: the Space Shuttle *Challenger* disaster of

¹³² Hardesty and Pisano, 1983, 158-161.

January 28, 1986. This tragic incident accentuated the danger of human flight, whether in a Jenny biplane or on the *Challenger*, ranging from Earl Daugherty to Amelia Earhart to Bessie Coleman to James Herman Banning to Jesse Brown to Ron McNair.¹³³

Early Black aviators set the stage for the success of the Tuskegee Airmen and the modern Black flyers. During the Golden Age of Aviation, the dream for all pioneer aviators was to create another generation of pilots. As pioneer aviator and member of the Chicago Air Pilot's Association in the 1930s Harold Hurd said in 1985, "We have always prayed and we have always hoped, someday in the future there would be guys like Guy Bluford, and then our work would not have been in vain." When Colonel Guion "Guy" Bluford met Harold Hurd's pilot colleague Cornelius Coffey, one of America's oldest Black pilots and 2023 National Aviation Hall of Fame Inductee, it was clear that each man thought of the other as an inspiration and a hero. Coffey recalled that "Bluford said to me that he was wondering if he would ever get the chance to meet me. And I said, 'Well I wondered the same about you.'"¹³⁴

The accomplishments of several of the African American aviators included in this essay are recognized in the February 16, 2023 U.S. Senate Resolution 73 "International Black Aviation Professionals Day." The resolution recognizes Emory Malick, James Herman Banning, Bessie Coleman, William J. Powell, Cornelius Coffey, the Red Tails, and Guion Bluford, among others. One of the organizations that made this resolution possible was the Organization of Black Aerospace Professional (OBAP), a not-for-profit organization founded in 1976 originally as the

¹³³ Hardesty and Pisano, 1983, 161-163.

¹³⁴ Hart, *Flying Free: America's First Black Aviators*, 1992, (quotes) 57-58; Enshrinement Ceremony, Meet the Class of 2023, Cornelius Coffey, National Aviation Hall of Fame, Sept. 22, 2023, acc. Sept. 27, 2023, <https://nationalaviation.org/programs/enshrinement/>.

Organization of Black Airline Pilots (OBAP). Over the years OBAP has evolved into an advocacy and education organization that includes not just airline pilots, but workers from all corners of the aerospace industries. This group has been holding conventions around the country since 1976, generally in association with other aviation groups such as the Bessie Coleman Aerospace Legacy and the United States Army Black Aviation Association. These groups serve as a support system for African Americans in the aviation and aeronautical community, including providing career path training for young people wishing to enter the industry. These groups are carrying on the vision of pioneering aviators such as William J. Powell and Cornelius Coffey who encouraged African Americans to get into the aviation industry on the ground floor.¹³⁵

Francisco Chang-Diaz was the first Hispanic astronaut to travel into space. Born in Costa Rica in 1950, Chang-Diaz moved with his family to Hartford, Connecticut, and finished public high school in that city. He became an American citizen in 1977, the same year he earned a doctorate from MIT in applied plasma physics to become a mechanical engineer and physicist. He was selected as an astronaut by NASA in 1980 and flew his first Space Shuttle mission in 1986 and a second in 2002. Chang-Diaz was also the director of the Advanced Space Propulsion Laboratory at Johnson Space Center in Houston, Texas from 1993 to 2005. He retired from NASA in 2005 and went into the private sector, including as a board member at Cummins since 2009. He has also been active with environmental protection and climate change issues since

¹³⁵ United States Senate Resolution 73, International Black Aviation Professionals Day, Feb. 16, 2023, acc. Sept. 20, 2023, <https://www.congress.gov/bill/118th-congress/senate-resolution/73?s=1&r=99>; Powell, *Black Wings*, Preface, xxxii-xxxv; "Empowering our Communities Through Aerospace," Organization of Black Aerospace Professionals News, August 2019 Convention Issue. The 2019 OBAP annual convention was held at the Hilton Los Angeles Airport Hotel from July 30 to August 2. Philip S. Hart and his wife Tanya Hart were presented with the Bessie Coleman Aerospace Legacy Award at the Founders & Pioneers Breakfast, where Alison Rose Jefferson was one of their guests. To learn more about OBAP professional development activities, visit <https://obap.org>.

his retirement. Chang-Diaz opened the door for other Hispanic astronauts, like Ellen Ochoa who was the first Hispanic female astronaut to fly into space in 1990, leading to her 1993 space mission. Ochoa logged nearly a thousand hours in orbit across four space missions. Other Hispanic astronauts have included Joseph M. Acaba and Jose M. Hernandez, the first Mexican American astronaut, whose story is the subject of a new 2023 film, *A Million Miles Away* from Amazon Studios.¹³⁶

The later decades of the twentieth century produced another Asian American aviator, Quang X. Pham who was born in Saigon, South Vietnam in 1964. He migrated to the U.S. when he was ten years old with his mother and three sisters during the invasion of South Vietnam by the Communist North Vietnamese Army. The family lived in Oxnard, California. His father Hoa Van Pham was a Lieutenant Colonel in the Vietnamese Air Force. He was left behind in South Vietnam where he was captured by the North Vietnamese, resulting in twelve years in a re-education camp, and was not reunited with his family until 1992. The younger Pham went on to graduate from UCLA with a bachelor's degree in economics. He also completed Marine Corps Officer Candidate School in 1986. Pham is recognized as the second Vietnamese American to complete this program, and the first Vietnamese American to earn Naval aviator's wings in the Marine Corps. After seven years as a helicopter pilot in the Marines serving during the Gulf War, he retired in 1999 and became active in the pharmaceutical industry, where he has

¹³⁶ "Franklin Chang-Diaz: Astronaut and Rocket Scientist," PBS Learning Media for Teachers/PBS SoCal, acc. Sept. 25, 2023, <https://ca.pbslearningmedia.org/resource/nsn09.sci.engin.systems.diaz/franklin-chang-diaz-rocket-scientist/>; "NASA's Hispanic Astronauts," National Aeronautics and Space Administration, acc. Sept. 27, 2023, https://www.nasa.gov/sites/default/files/atoms/files/hispanic_astronauts_fs.pdf; *Million Miles Away* directed by Aljandra Marquez Abella, Amazon Studios, acc. Sept. 25, 2023, <https://press.amazonstudios.com/us/en/original-movies/a-million-miles-away>.

achieved business success and received numerous awards as a serial entrepreneur. Pham as an author and businessman has served on boards of the Marines Memorial Association, Orange County Forum, and on the Chapman University Business School Board of Advisors.¹³⁷

Taylor Gun-Jin Wang was the first Asian American in space serving as a payload specialist. Born in China in 1940, he immigrated to the U.S. at the age of twelve with his family. Wang earned a Bachelor of Science, Master of Science, and doctorate in physics from UCLA. He was a senior scientist for the Jet Propulsion Laboratory (JPL) at California Institute of Technology, focusing on material processing in space when in 1985 he became part of the STS-51B *Challenger* crew as part of Spacelab-3, an onboard research facility where he performed experiments. Since then he has served as principal investigator on several Spacelab missions. Dr. Wang has written numerous journal articles and holds twenty-eight U.S. patents. He has traveled close to three-million miles in space, has orbited the Earth 110 times and logged 168 hours in space.¹³⁸

Another Asian American astronaut, Mark Polansky was born in New Jersey to a Jewish father and a Korean mother from Hawaii. He joined the U.S. Air Force after graduating from Purdue University in Indiana with both a bachelor's degree and master's degree in aeronautical engineering and aeronautics. He earned his pilot wings in 1980 and flew F-15 and the F-5E aircraft. He attended test pilot school at Edwards Air Force Base in San Bernardino, California,

¹³⁷ Quang X. Pham, *A Sense of Duty: Our Journey from Vietnam to America* (New York: Presidio Press/The Random House, Inc., 2005/2010); "Asian-Americans in Aviation, Quang X. Pham," San Diego Air and Space Museum, acc. Sept. 10, 2023, <https://sandiegoairandspace.org/exhibits/online-exhibit-page/asian-americans-in-aviation#:~:text=Quang%20X.,Vietnamese%20forces%20were%20entering%20Saigon.>

¹³⁸ "Taylor Wang, facts for kids," Kids Encyclopedia Facts, acc. Sept. 29, 2023, https://kids.kiddle.co/Taylor_Wang; Taylor G. Wang Biographical Data, National Aeronautics and Space Administration, May 1985, acc. Sept. 29, 2023, <https://www.nasa.gov/wp-content/uploads/2016/01/wang-t.pdf>; "Taylor Wang," Honorary Board of Directors, Chinese American Museum website, <https://www.chineseamericanmuseum.org/new-page-4>.

after which he conducted weapons and systems testing in the F-15 and A-10 aircraft. In 1992 Polansky joined NASA as an astronaut engineer and research pilot. By 1996 he was selected as an astronaut candidate and flew on his first space mission in 2001 on the STS-98 *Atlantis* space shuttle where he served as the pilot. He went on missions again in 2006 and 2009. Polansky has logged nearly a thousand hours in space.¹³⁹

Hawaiian American Ellison Onizuka of Japanese ancestry, was born in 1945 and earned his bachelor's and master's degrees in aerospace engineering from the University of Colorado, Boulder where he was a participant in the Reserve Officers Training Corps (ROTC) program. After graduation, he entered into active duty with the U.S. Air Force and became an aerospace test flight engineer at McClellan Air Force Base in California. Onizuka was selected as a member of the 1978 NASA Astronaut Class also known as the "Thirty-Five New Guys" because it was first class in almost a decade and the first to include women, and Hispanic, Asian and African Americans. Gregory and Bluford were also in Onizuka's 1978 class. He flew his first space flight as a mission specialist on the first STS 51-C *Discovery* space shuttle U.S. Department of Defense mission, which completed forty-eight orbits around Earth. Onizuka was then a mission specialist on the ill-fated *Challenger* space shuttle on January 28, 1986, where both Judy Resnick and Ron McNair, who are also discussed in this essay were crew members as well. The Astronaut Ellison S. Onizuka Space Center at the Kona International Airport, the primary airport for the state of

¹³⁹ "Mark Polansky Biographical Data," National Aeronautics and Space Administration, July 2012, acc. Oct. 2, 2023, https://www.nasa.gov/wp-content/uploads/2016/01/polansky_mark.pdf; "Asian American and Pacific Islander Heritage Month: Mark L. Polansky, Korean-American Astronaut," TransportationHistory.org, May 20, 2020, acc. Oct. 2, 2023, <https://transportationhistory.org/2020/05/29/asian-american-and-pacific-islander-heritage-month-mark-l-polansky-korean-american-astronaut/>.

Hawaii, is an educational facility dedicated to the memory of this Hawaiian American pioneering astronaut.¹⁴⁰

President John F. Kennedy initiated the Space Program during the early years of his administration in 1961. He declared that training female astronauts would delay the national goal of putting a man on the moon by the end of the decade. It was not until 1972 that Congress passed an amendment to the Civil Rights Act of 1964 stating that federal agencies could not discriminate on the basis of sex, race, religion, or national origin. NASA, a federal agency, then hired the first female astronauts in 1978. They were Sally Ride, Judith Resnick, Kathy Sullivan, Shannon Lucid, Anna Fisher, and Rhea Seldon. Sally Ride was born in Encino, California in 1961. She joined NASA in 1978 and in 1985 became the first American woman astronaut to travel into space and the third women overall, following two Russian cosmonauts Valentina Terashoka in 1963 and Svetlana Savitshayaia in 1983. Judith Resnick was born in Akron, Ohio in 1949. She was an electrical engineer, software engineer, and pilot who died in the Space Shuttle *Challenger* disaster in 1986.¹⁴¹

Boldly going into the business and regulatory side of space flight where Black, Latinx, Asian, Indigenous, and other persons of color community members are few and far between, Black Californian Stephanie Lee Miller (now Lee Myers) served as director of the Office of

¹⁴⁰ “Ellison Onizuka,” Challenger Learning Center Hawaii website, acc. Oct. 2, 2023, <https://challengercenterhawaii.com/the-challenger/ellison-onizuka/>; “Ellison Onizuka: First Asian American in Space,” National Aeronautics and Space Administration, acc. Oct. 2, 2023, <https://www.nasa.gov/image-article/ellison-onizuka-first-asian-american-space/>; “Ellison Onizuka Biographical Data,” National Aeronautics and Space Administration, Jan. 2007, https://www.nasa.gov/wp-content/uploads/2016/01/onizuka_ellison.pdf; Astronaut Ellison S. Onizuka Space Center, Hawaii Aviation website, acc. Oct. 2, 2023, <https://aviation.hawaii.gov/airfields-airports/hawaii/astronaut-ellison-s-onizuka-space-center/>.

¹⁴¹ Carole S. Briggs, *Women in Aviation: At the Controls* (Minneapolis, MN: Lerner Publications Company, 1991), 42, 43; Jim Haskins and Kathleen Benson, *Space Challenger: The Story of Guion Bluford* (Minneapolis, MN: Carolrhoda Books, 1984), 38; Ashlee Anderson, “Sally Ride (1951-2012),” National Women’s History Museum, 2018, acc. Oct. 1, 2023, <https://www.womenshistory.org/education-resources/biographies/sally-ride>.

Commercial Space Transportation at the U.S. Department of Transportation during the administration of President George H.W. Bush from 1989 to 1993. She oversaw the new commercial market development for privately owned large rockets to take satellites and other payloads into space. On her watch, an eleven-story Delta rocket, produced and launched by McDonnell Douglas Space Systems Company of Huntington Beach, California took off from Cape Canaveral, Florida. Carrying a television broadcasting satellite for a British company, this was the first time in the history of the space age that a privately owned rocket was big enough to launch into an Earth orbit. She was in charge of the regulations of these new rockets with regards to mission safety, insurance standards and license issuing to companies for private launches. Today Southern California companies continue to take the lead in the “privatization” of space for manned and unmanned vehicles, new products and related technological innovations while regulation of the industry has moved to the Federal Aviation Administration.¹⁴²

There is still much more collaboration the aviation, aerospace and related industries need to do with educational institutions to inspire generations of youth to obtain the education needed to develop more pioneers for the future with the right critical thinking and creative skills to do work like some of the pioneers highlighted in this essay.

¹⁴² Robert A. Kleinhenz, Kimberly Ritter-Martinez and Rafael DeAnda, “The Aerospace Industry in Southern California,” Los Angeles Economic Development Corporation/The Kyser Center for Economic Research, August 12, 2012, 22, acc. Sept. 18, 2023, <https://www.econ-jobs.com/research/50546-The-Aerospace-Industry-in-Southern-California.pdf>; Christine Cooper, Shannon Sedgwick and Wesley DeWitt, “The Changing Face of Aerospace in Southern California: The Future is Here,” Los Angeles Economic Development Corporation Institute for Applied Economics and San Diego Regional EDC, March 2016, 3, acc. Sept. 18, 2023, https://laedc.org/wpcms/wp-content/uploads/2016/03/LAEDC_Aerospace_FINAL_20160331b.pdf; “About the Office of Commercial Space Transportation,” Federal Aviation Administration, acc. Oct. 11, 2023, https://www.faa.gov/about/office_org/headquarters_offices/ast.



Fig. 83. Pictured here is a United Airlines plane, a Boeing 377 (Mainline Stratocruiser) parked at Long Beach Airport. This was one of the last piston-powered propeller airplanes to fly before being replaced by early jets. It was an early luxury wide body plane that could fly transoceanic routes which could seat a hundred passengers in upper level seating and sleeping berths along with a lower level lounge. The photograph appears to show an open house at the airport with visitors taking tours of the United Airlines plane and the airfield. At the dawn of commercial aviation United Airlines was created in 1931 with the consolidation of mail and passenger service operators Boeing Air Transport, Pacific Air Transport, National Air Transport, and Varney Airlines. Credit Line: Lloyd Richards, December 19, 1950.

Image: 2011_038_462, Long Beach Airport Folder 2011.038.437.501, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
Historical Society of Long Beach



Fig. 84. Members of the first flight crew for Douglas Aircraft DC-10's maiden flight confer prior to takeoff from Long Beach Airport, December 29, 1970. Left to right: Clifford L. Stout, project pilot/captain for the flight; Harris C. Van Valkenburg, deputy chief engineering pilot/ first officer; John D. Chamberlain, flight engineer/second officer; and Shojun Yukawa, flight test engineer (a Japanese American). Douglas had recently become a division of the newly merged McDonnell Douglas Corporation. As part of the complete DC-10 test program, this airplane was the first to have to go through trials for a noise certification to meet the new regulations that set noise standards for all new type sub-sonic aircraft in order to receive Federal Aviation Administration (FAA) approval for airworthiness. The aircraft's technological innovation was viewed as potentially being able to solve the environmental noise problems caused by commercial airplanes.

Courtesy of Douglas J. Ingells, *The McDonnell Douglas Story* (Fallbrook, CA: Aero Publishers, Inc., 1979), 194.

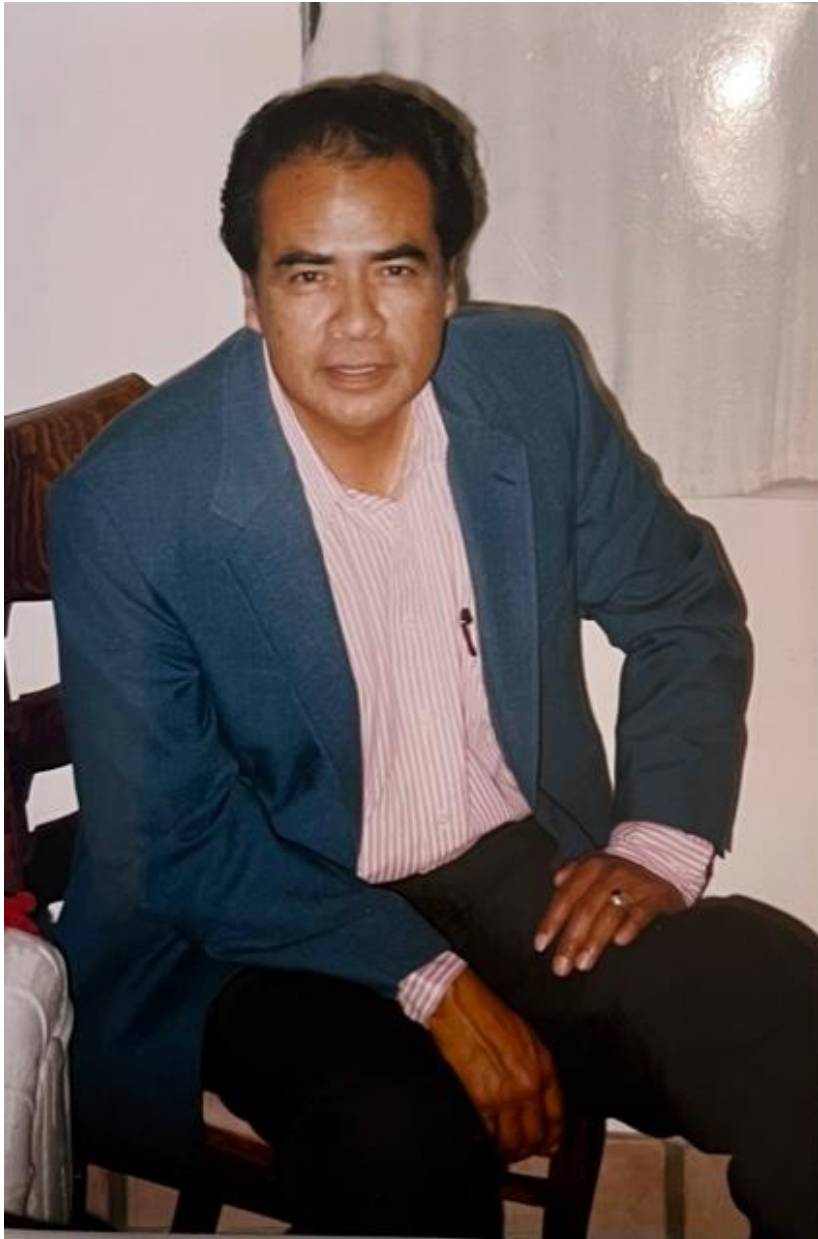


Fig. 85. California native son, Leonard “Nayo” Colacion worked for most of his thirty-five year career in aerospace research at Rockwell International on many programs including the Apollo space mission in Downey, CA and on satellite development at Seal Beach, CA, no date.

Courtesy of Lorraine Colacion Olsen

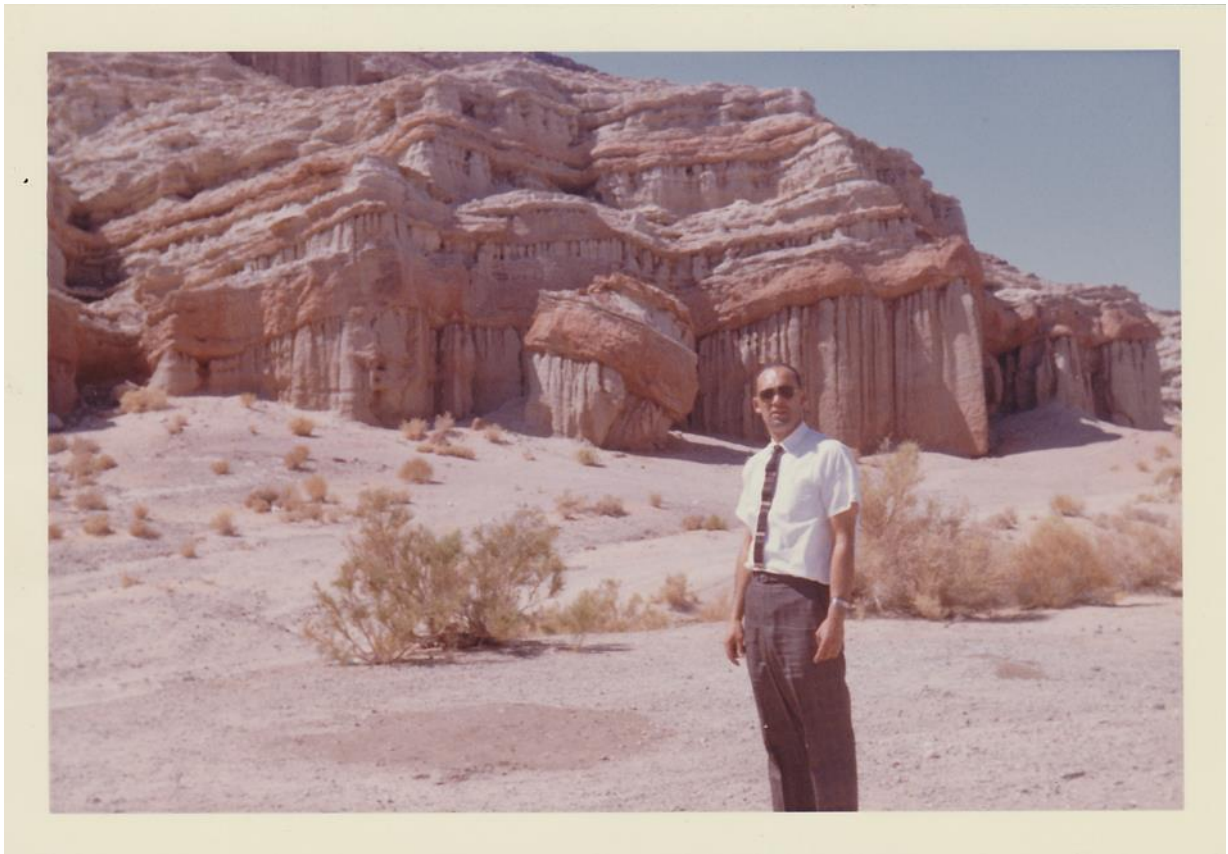


Fig. 86. John Quincy Tabor, Jr., a civilian chemist at one of the Naval ordinance test sites he worked at in the California or Nevada desert from the late 1940s to early 1960s. He worked at small and large operations mostly in the defense industry on components and sections of various rocketry. He worked at Douglas Aircraft in Huntington Beach, CA from 1964-1967 on the team developing the Saturn SSV lunar orbiter in the NASA Apollo program which put a human on the moon.

Courtesy of Allyson Tabor



Fig. 87. Quang X. Pham, a Vietnamese-born American who became the first Vietnamese American to earn Naval aviator's wings in the Marine Corps. He served seven years as a Marine helicopter pilot in the Gulf War. After retirement for the Marines in 1999, Pham became a successful entrepreneur in the pharmaceutical industry and lives in Southern California.

Courtesy of Orange Juice Blog, <https://www.orangejuiceblog.com/2009/05/quang-x-pham-may-take-on-van-tran-for-the-47th-congressional-district/>



Fig. 88. Taylor Gun-Jin Wang was the first Asian American in space serving as a payload specialist on the Space Shuttle *Challenger* mission STS-51-B. He was born in China in 1940 and immigrated to the U.S. in the early 1960s.

Photo source: [Images.jsc.nasa.gov](https://images.jsc.nasa.gov) NASA photo ID: S84-36141
Courtesy of NASA



Fig. 89. The pioneering crew of the ill-fated Space Shuttle *Challenger* STS 51-L is seen in this 1986 file photo released by NASA. Left to right: Ellison Onizuka, Mike Smith, Christa McAuliffe, Dick Scobee, Greg Jarvis, Ron McNair and Judy Resnick. Onizuka and Resnick were members of the 1978 NASA Astronaut Class known as the “Thirty-Five New Guys” because it was the first one in a decade and the first one to include women, Hispanic, Asian and African Americans. Onizuka was a Hawaiian American of Japanese ancestry born in 1945 who had earlier flown as a mission specialist on the first STS 51-C *Discovery* space shuttle. A physicist from South Carolina, McNair was the second African American astronaut in space on the earlier *Challenger* mission STS 41-B after Guion Bluford in 1985. An electrical engineer, Resnick was from Ohio and the second American woman astronaut to travel in space after Sally Ride in 1983. She was a mission specialist on this her second and last space launch.

Courtesy of NASA



Fig. 90. Sally Ride was a pioneering physicist and the first American woman and youngest to fly in space in 1983 on the *Challenger's* STS-51 space shuttle mission. She was also the first acknowledged gay astronaut. Before Ride became an astronaut, she was a ranked tennis player and later she went on to be a physicist professor at University of California, San Diego. She and her partner, Tam O'Shaughnessy began a non-profit to engage children from all backgrounds to take an interest in science, technology, engineering, and math (STEM). In 2019 Mattel added Ride to its "Inspiring Women's" doll series.

Image: <https://www.nasa.gov/learning-resources/for-kids-and-students/who-was-sally-ride-2-grades-k-4/>
Courtesy of NASA

Growing Pains: Long Beach, Suburbs and the Aeronautics Industries

From the 1930s to 1950s, the Long Beach Airport was growing into one of the nation's busiest airports. This growth and development was marked by a tension between airport expansion and residential development near the airport. There was little residential growth in Southern California during the years of World War II as labor and supplies were directed to the war effort. Once the war ended, real estate sales and construction skyrocketed. One early project in Long Beach was the \$125 million Lakewood Park residential subdivision developed by Mark Taper. Lakewood was the second largest residential subdivision in the U.S. with 2,100 homes built in a proposed 15,000 home project. The nearby Lakewood Center was built on 154 acres, and once completed, was the world's largest shopping center. When it opened on February 18, 1952, the center's May Company was the largest suburban department store in the nation with 345,600 square feet of floor space.¹⁴³

The push and pull between airport expansion and nearby residential development was a constant over the next several decades. An initial foray into this dynamic centered around a 1956 citywide improvement program to be paid for with tideland oil money. Included in the program was the extension of the airport's diagonal runway. This was a controversial measure opposed by some property owners in the surrounding areas of Los Altos and Lakewood. The approval of the runway was seen as showing support of the continuing expansion of Long Beach's airplane manufacturing industry. Douglas Aircraft announced plans to build huge jet

¹⁴³ Burnett, 2011, 241.

liners in the additional buildings that were to be constructed on the east side of Lakewood Boulevard, which would require four-thousand to six-thousand additional employees. Opponents of the bond measure reflected that not all residents were happy with these plans. Those who were in opposition were concerned with the noise and possible airplane accidents. In addition, they claimed that the bond issue was essentially a gift of public money to Douglas.¹⁴⁴

On June 27, 1961, the Long Beach City Council approved a master plan to guide the city's future. The municipal airport was one of several land uses that was included in the plan that would impact the city over the next five-plus decades. This was the first comprehensive master plan for the city of Long Beach, but not the first master plan for the airport. In the 1930s the first master plan was prepared for the airport, and it guided its development through World War II and into the 1950s. The 1961 master plan encompassed the entire city and envisioned the airport as a vital hub of the city's future. With this city-approved master plan, by 1964 the airport was often described as the nation's busiest all-purpose airport.¹⁴⁵

Throughout the 1960s and mid-1970s, the airport continued to expand with support from the Federal Aviation Administration as part of a \$75.9 million construction and improvement program to be divided among 452 civil airports across the nation. Clearly the expansion of airports across the nation during this time signaled a major advance in local economies as aviation and aeronautical activities became a core activity in cities and towns across the country. In Long Beach as in other cities and towns across the nation, often nearby

¹⁴⁴ Burnett, 2011, 242-243.

¹⁴⁵ Burnett, 2011, 243.

residents were not happy with the expansion of airports. Long Beach history chronicler and author Claudine Burnett devotes a chapter in her *Soaring Skyward...* book to this topic and notes, “... there had been a somewhat comfortable consensus over airport expansion when many of the residents living around the airport worked for Douglas, or were involved in other airport related businesses ... But sentiments changed as many involved in the aviation industry moved away and others not involved in the industry took their place.”¹⁴⁶

A 1979 master plan for the airport recommended a gradual increase in short haul airline service that would triple the annual passengers using airlines at Long Beach Airport by 1988. Homeowners around the airport rallied under a “no growth” banner as concerns were voiced about possible airplane crashes, pollution, and tumbling property values. The Long Beach Unified School District also expressed concerns about airport expansion and even threatened a lawsuit if the master plan was approved.¹⁴⁷

Eventually, comprehensive measures were put in place that resulted in a noise-control ordinance approved in May 1980. This compromising measure limited the number of flights in and out of Long Beach Airport and prohibited flights from 10 p.m. to 7 a.m. This ordinance was not viewed favorably by the airlines wanting to use Long Beach Airport and indeed spelled trouble for the airport. In 1983, Alaska Airlines filed a lawsuit against the City of Long Beach after flights were capped at fifteen per day by the city. Other airlines soon joined Alaska in the suit. The suit eventually ended, but major airlines had already begun to leave Long Beach Airport in record numbers.¹⁴⁸

¹⁴⁶ Burnett, 2011, 243, 244, (quote) 245.

¹⁴⁷ Burnett, 2011, 245-247.

¹⁴⁸ Burnett, 2011, 248.



Fig. 91. Frances Berna (left) won her third All-Woman Transcontinental Air Race (AWTAR) with her sister, Edna Bower who was her co-pilot, 1956. The Bendix Trophy Air Race of the National Air Races and the AWTAR used Long Beach Airport as the starting place of these transcontinental events from the 1930s to 1970s. Fran Berna, who became a Long Beach flying school operator, placed in sixteen of the twenty AWTAR events, winning seven times and coming in second four times to bring trophies home to Southern California. Begun in 1929, the AWTAR was run by the Ninety-Nines, the international organization of women pilots. Credit Line: Associated Press Wirephoto.

Image: 2013_102_1302
Historical Society of Long Beach



Fig. 92. Jack London (left), waits to give Frances Bera the takeoff flag signal while a runner (right) hands her the official flight logbook at the start of the All-Woman Transcontinental Air Race, 1962. AWTAR flight log books had to be stamped by a time clock at every stop on the flight route across the country. Note the difference in the aircraft construction from earlier twentieth century monoplanes and the sponsors names printed on the fuselage.

Image: 2013_102_1304

Historical Society of Long Beach



Fig. 93. Long Beach Airport Director Nicolas J. Dallas (second left) and unknown man with flight attendants of Pacific Southwest Airlines (known as PSA) celebrating new routes that opened from Long Beach to San Jose and Oakland in California during the twenty year period of growth for the American economy and commercial airline travel in the post-World War II decades, no date. In the 1960s PSA flight attendant uniforms were brightly colored orange, red and pink miniskirts. PSA was a regional U.S. airline headquartered in San Diego, CA that operated from 1949 to 1988. The company's recognized trade mark was smile painted on the nose of each airplane and it was called "the World's Friendliest Airline." During the years PSA operated, Douglas Aircraft DC lines were some of the airplanes in its fleet.

Image: 2011_038_655, Nicolas J. Dallas folder 2011.038.622 659, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
 Historical Society of Long Beach

From small workshops and hand-built aircraft and the first air shows at Dominguez Hill in 1910 to Cal Rodgers' fatal airplane crash in Long Beach in 1912 to the twenty-mile race between Earl Daugherty and Harry Christofferson filmed by Balboa Studios in 1916 to the impact of world wars and the growth of aviation technological innovations that led to the development of big aircraft manufacturing plants to aerospace innovations — Long Beach and its airport have been at the center of the story for over 100 years. The participation of aviators of Black, Latinx, Asian, Indigenous, and other persons of color in and around Long Beach Airport were limited except for a few instances such as with John Montijo and Henry Ohye. However, women aviators have been present in Long Beach from the early days. Starting in the 1940s some Black, Latinx, Asian, Indigenous, other persons of color community members, and woman also gained employment in the aviation, aerospace, and related industries, including in research, development, and manufacturing, mostly at the companies with federal defense contracts. People of color and women have also had some limited gains in obtaining positions in airport facilities and in commercial airline occupations; some even moved in to leadership roles.¹⁴⁹

Southern California led the way in technological innovations that made the region's aerospace companies an important contributor of economic growth in the last century and beyond. Along with the mild climate, "boosterism" or promotion by local public officials, newspaper and periodical publishers, real estate developers, and pioneering aviation visionaries, entrepreneurs and risk-takers, along with local universities supplying research, engineers and scientists — all facilitated the growth of aviation, aerospace, and related

¹⁴⁹ "City of Long Beach Historic Context Statement," July 10, 2009, 176; Burnett, 2021, 273.

industries. The end of the Cold War in the late 1980s into the early 1990s cut aerospace and defense industries budgets. Other budget reprioritization and corporate reorganizations occurred in the early 2000s. In these eras consolidation happened in aerospace's largest firms and many smaller firms were forced to close, along with consolidation of commercial airline firms, which caused the loss of thousands of jobs, even while revenues increased due to rising productivity. In Long Beach, McDonnell Douglas closed its plant in 2015.¹⁵⁰

Even with these changes, Southern California's aerospace industries are still a vital part of the regional economy and no less innovative. Los Angeles County has continued to retain the largest slice of aerospace industries employment in California. Due to the established aerospace ecosystem of large and small companies and manufacturing, research and design infrastructure there are still opportunities for growth of defense and civil aerospace activities, including spacecrafts, satellites, helicopters, business aircraft and civilian applications of drones or unmanned aircraft systems, Global Positioning Systems (GPS), and other emerging technologies.¹⁵¹

As the Long Beach Airport centennial approaches it is important to keep in mind the impact this aviation center has had on airports in California, the U.S. and around the world with its linkage in the global airline travel network. This airport has grown and developed through a variety of cultural, political, and economic environments over the last one hundred years in a community which has mostly supported its evolution. As there has been more recognition of

¹⁵⁰ Kleinhenz, Ritter-Martinez and DeAnda, August 12, 2012, 1, 4, 10, 20, 23-24; Cooper, Sedgwick and DeWitt, March 2016, 5, 9, 14, 19, 20, 41.

¹⁵¹ Kleinhenz, Ritter-Martinez and DeAnda, August 12, 2012, 1, 4, 10, 20, 23-24; Cooper, Sedgwick and DeWitt, March 2016, 5, 9, 19, 20, 41.

equity and inclusion of minoritized groups and enforcement of civil rights laws since the 1960s, more Black, Latinx, Asian, Indigenous, and other persons of color community members and woman have obtained employment in aviation, aerospace, and related industry sectors. Nevertheless, there is still work to be done to make these industrial sectors personnel more reflective of the diversity represented in American society. With The Boeing Company in 2023 publicly recognizing the importance of actions it is taking to increase the number of Black, Latinx, Asian, Indigenous, and other persons of color employees through its global equity, diversity, and inclusion strategy: “[To create] an environment that retains and attracts the world’s top talent, and inspires every team member to do their best work and grow their career while making a positive impact on the world” — hopefully other companies in the aviation, aerospace and related industries are also actualizing similar goals.¹⁵²

Presently the airport is 1,166 acres with three runways, as well as a unique campus that includes a mix of commercial office buildings, hotels, retail, industrial facilities, and a municipal golf course. It was noted by the Los Angeles Economic Development Corporation in 2012 that global air traffic was expected to increase each year at 4.9 percent over the next twenty years. This bodes well for the Long Beach Airport continuing to be a vital economic engine for the airport itself and the City of Long Beach. Visitors spending money in the local economy for hotels, off-airport ground transportation, restaurants, shopping, entertainment, and other

¹⁵² “Global Equity, Diversity & Inclusion” webpage, (quote from webpage), The Boeing Company, acc. Sept. 27, 2023, <https://www.boeing.com/principles/diversity-and-inclusion/#/commitment>.

services, supports both commercial and general aviation operations and employment at Long Beach Airport and throughout the region.¹⁵³

As important local, regional, national, and global institutions, the “personality” of Long Beach Airport and the collective aviation, aerospace, and related industries can perhaps be captured with a quote from Tanya Hart, the narrator of the 1987 PBS film, *Flyers in Search of a Dream* in the closing segment about the aviator personality — “Progress is made by those who dare, those who stand up and take risks. The early aviators risked their lives and whatever money they had, and often they faced only ridicule as their reward. But it is through the lives of these early pioneers that the dream of flight lives on.”¹⁵⁴

¹⁵³ Kleinhenz, Ritter-Martinez and DeAnda, August 12, 2012, 16; Michael Gougis, “Commercial Aviation: Powering The Long Beach Economy,” *Wings Over Long Beach Aviation Expo* event (Nov. 2–3, 1996) publication, Prepared by the *Long Beach Business Journal*, November 1996, 18; “Economic Impact Study of Long Beach Airport 2019, Prepared by Unison Consulting, acc. Sept. 24, 2023, <https://www.longbeach.gov/lgb/community-information/economic-impact-information/>.

¹⁵⁴ Hart, *Flying Free: America’s First Black Aviators*, 1992, (quote) 59.



Fig. 94. Nicolas J. Dallas on the tarmac posed in front of ground and air transportation, a Goodyear bus, Goodyear blimp and a helicopter, respectively at the Long Beach Airport, ca. 1960s. Dallas was the airport's director of aeronautics from 1962 to 1976. The airport tarmac improvements from a dirt field to asphalt paved and technological advancements in the transportation aircraft fuselages from wood to metal and glass, along with inflatable tires on the bus can be observed here. A long-time resident of Long Beach, Dallas was a Navy pilot who served with distinction in the Pacific Theater during World War II and he served early in his working career as a local beach lifeguard.

Image: 2011_038_653, Nicolas J. Dallas folder 2011.038.622 659, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
Historical Society of Long Beach



Fig. 95. DC-10 wide body trijet aircraft bought by AeroMexico taking off from Long Beach Airport, no date. The airplane was originally manufactured by Douglas Aircraft Company as it was merging with McDonnell Corporation around 1970 and production ended in 1989. These companies since 1997 have been part of The Boeing Company. The quietness of the DC-10 engines during takeoff and capabilities for transcontinental trips as well as short hauls, set the standards for the future advances in aircraft range capacities and sound level requirements which the City of Long Beach's blue sky played a major role as the technology was being tested.

Image: 2011_038_587, Nicolas J. Commercial Aviation folder 2011.038.540.589, Nicolas J. Dallas Collection, Box 1, 2011.038-2011.038.142
Historical Society of Long Beach

Timeline

Year	Worldwide	Regionally
1903	Wilbur and Orville Wright demonstrate an airplane's capability of powered sustained flight in Kitty Hawk, North Carolina.	
1905		Balloon demonstrations on the shoreline in front of The Pike amusement park as an enticement to get people to visit Long Beach and this new attraction.
1910	Blanche Stuart Scott was the first American woman aviator. She was also the second woman to drive an automobile across the U.S.	The first Los Angeles International Air Meet event was held at Dominguez Hill at Rancho San Pedro, today the City of Carson, December 24, 1910 to January 3, 1911.
1910-1919		Long Beach's shoreline near downtown is used as an airfield by early aviators.
1911	Harriet Quimby becomes the first woman to earn pilot's license from Aero Club of America. She was also a journalist and filmmaker.	The Birnie brothers led by Bernard built the first biplane made of pressed steel ribs and cloth in Long Beach which flew about five feet above the ground.
1911		Frank Champion became the first licensed airplane pilot in Long Beach and then trained Earl Daugherty who became the second licensed pilot in the city.
1911		Glen L. Martin establishes the first aviation manufacturing company in California.
1912	Harriet Quimby becomes first woman to fly across the English Channel.	Cal Rogers' first transcontinental flight in his Vin Fiz Flyer lands on the shoreline at Long Beach after beginning in Sheepshead Bay, Long Island, New York.

Year	Worldwide	Regionally
1912	Blanch Stuart Scott was the first woman to perform in the third Los Angeles International Air Meet event.	The third Los Angeles International Air Meet event was held at Dominguez Hill, January 20-28, 1912.
1912	Tom Gunn was the first Chinese American to perform in the third Los Angeles International Air Meet event and the first licensed Chinese American pilot from the Fédération Aéronautique Internationale.	
1913	Glenn L. Martin made history with Georgia “Tiny” Broadwick when she became the first woman to parachute from an airplane he manufactured and was piloting.	The fourth and last Los Angeles International Air Meet was held at Dominguez Hill at Rancho San Pedro, today the City of Carson, January 29 to February 5, 1913.
1913		Long Beach aviator Earl Daugherty is a participant in the fourth Los Angeles International Air Meet, held at Dominguez Hill.
1914–18	World War I	
1919		Earl Daugherty opens Daugherty School of Aviation and becomes a pioneer in commercial aviation.
1920		Long Beach develops municipal flying field with Earl Daugherty on his land at Long Beach Boulevard and Willow Street called Daugherty Municipal Airfield. Closed in 1925 once the new airport was established.
1920s		University of Southern California and California Institute of Technology (formerly Throop Polytechnic Institute) begin to be involved with aviation.

Year	Worldwide	Regionally
1921	Bessie Coleman earns her pilot's license in France to become the first African American woman with a pilot's license from the Fédération Aéronautique Internationale	At Long Beach's Daugherty-Municipal Airfield, the first all-female air race ever held in Southern California takes place. Amelia Earhart, at age twenty-three, is there at the event and becomes inspired to train to be a pilot.
1921		Long Beach is an aviation leader with nine women aviators.
1923		Bessie Coleman, the only African American woman flier, gives an exhibition flight at Rogers Field (Wilshire Boulevard and Fairfax Avenue) in Los Angeles. She has her first crash on this flight.
1923-24	Douglas Aircraft World Cruisers were built to circle the globe. The airplanes were named after the cities: the Seattle, the Chicago, the Boston and the New Orleans.	Ground breaks on new Long Beach Airfield at Cherry and Spring streets, one of the first municipally owned airports in the country. The new airfield opens in 1924. This site today with additional land acquired over the years, is the Long Beach Airport.
1925		Two-day airmail service starts between Long Beach and New York.
1926	African American woman aviator Bessie Coleman dies in an airplane crash over Jacksonville, Florida.	
1927	Airplane pilot Charles A. Lindbergh completed the longest, first solo non-stop flight from New York City to Paris in the aircraft named "The Spirit of St. Louis." His success boosted attention about aviation worldwide.	Mines Field opened to become the site of what is today Los Angeles International Airport.

Year	Worldwide	Regionally
1928	Long Beach Airport became the first airfield in Southern California and the U.S. to illuminate its field at night.	Earl Daugherty dies in an airplane crash over Long Beach.
1928-29	William J. Powell moves to Los Angeles to open a flight school to teach African Americans to fly. He recruits James Herman Banning, one of the best African American aviators in the country, to become an instructor with the Bessie Coleman Aero Club.	Long Beach Airport becomes Army and Navy aviation training centers.
1929		Long Beach's Gladys O'Donnell comes in second place ahead of Amelia Earhart and Pancho Barnes in the first National Women's Air Derby from Santa Monica, California to Cleveland, Ohio.
1929		Long Beach Municipal Airport is officially dedicated as Earl Daugherty Field, in honor of the father of aviation who died in 1928.
1930	California has fifty-two women pilots, more than one-fourth of the 200 American women licensed to fly.	Long Beach was home to five of the 200 American women pilots and of the twenty-two from California which included: Virginia Blume, Edna M. Coulter, Gladys O'Donnell, Mary Billy Quinn and LaBelle Sweeley.
		Gladys O'Donnell won the 1930 Women's Air Derby from Long Beach to Chicago, Illinois.
1931	The second Colored Air Circus takes place on Dec. 6, 1931 with several great African American aviators of Los Angeles and international renown aviator Hubert F. Julian.	

Year	Worldwide	Regionally
1932	James Herman Banning and Thomas C. Allen were the first African American airplane pilot team to complete a roundtrip U.S. transcontinental flight from Los Angeles, California to Long Island, New York.	
1933		Henry Ohye became the first Nisei, or second-generation Japanese American, to earn his commercial aviation license. He went on to form the Japanese Aeronautical Association at Mines Field (today known as Los Angeles International Airport).
1936	A Control tower to direct air traffic is erected in 1936 by the U.S. Civil Aeronautic Authority at Long Beach Airport.	The City of Long Beach purchases additional land from the Montana Land Company next to the airport.
1938		American, United, TWA and Western airlines announce service at Long Beach Airport.
1939–1945	World War II	
1940		Douglas Aircraft Company opens a new airplane manufacturing plant near the municipal airport in Long Beach on land purchased from the Montana Land Company.
1941	The Japanese attack Pearl Harbor and the U.S. joins World War II.	U.S. Army Air Corps takes control of Long Beach Airport as an Air Transport Command.

Year	Worldwide	Regionally
1941	Tuskegee Airmen combat flight training begins at Tuskegee Institute in Alabama.	Long Beach's new Streamline Moderne style terminal building designed by William H. Austin and Kenneth S. Wing, with painted murals and multi-colored tile mosaic floors designed by artist Grace R. Clements funded by the Work Progress Administration, a federal New Deal program, was supposed to open. The terminal opening was delayed due to the Pearl Harbor attack on December 7, 1941 until 1942.
1942		Navy transfers its aviation operations from Long Beach Airport to Los Alamitos Air Station.
1944		Long Beach is one of the only seven major military transport bases in the U.S.
1946		Army ferry operations close at Long Beach Airport.
1947-1991	Cold War – a political, economic, and propaganda struggle after World War II end between the U.S. and the Soviet Union and their respective rivals over whether democracy or communism would dominate eastern Europe and the rest of the world.	
1950-1953	Korean War	
1954-1975	Vietnam War	
1956	Long Beach Airport becomes a Nike Missile site for America's defense operated by the U.S. Army.	

Year	Worldwide	Regionally
1960		The U.S. Air Force which is the evolution of the Army Air Corps leaves Long Beach Airport.
1963	Nike Missile site for America's defense operated by the U.S. Army is closed at Long Beach Airport.	
1965-1981		Aviation enthusiastic and Japanese American pilot Henry Ohye promoted the "Henry Ohye Trophy Race" with Long Beach as the starting point.
1967	Douglas Aircraft Company merges with McDonnell Company of St. Louis, Missouri.	
1980		Noise control ordinance is adopted in Long Beach, one of the first in the U.S.
1997	McDonnell Douglas merges with The Boeing Company of Seattle, Washington.	
2001-2021	War in Afghanistan	
2003-2011	Iraq War	
2007		Long Beach City Council approves Phase I Terminal Area Improvement Program.
2009	President Barack Obama arrives at Long Beach Airport in <i>Air Force One</i> .	
2010-2013		Newly renovated concourse and new parking garage opens as part of Phase I Terminal Area Improvement Program.

Year	Worldwide	Regionally
2015	Last C-17 Globemaster III is manufactured in Long Beach.	
2022		New Ticketing Lobby and Checked Baggage Inspection System facility open as part of the first two projects in the Phase II Terminal Area Improvement Program.
2023		Long Beach Airport Centennial
2024		Historic Terminal set to re-open after year-long renovation and seismic retrofit.

Bibliography

“About the Office of Commercial Space Transportation,” Federal Aviation Administration. Accessed Oct. 11, 2023, https://www.faa.gov/about/office_org/headquarters_offices/ast.

“About Pancho Barnes.” HappyBottomRidingClub.com. Accessed Aug. 16, 2023, <https://happybottomridingclub.com/about-pancho/>.

Albertson, Teresa Kay. “Ames dedicates airport to Black aviator pioneer in Juneteenth celebrations.” *Ames Tribune*, June 12, 2023. Accessed Aug. 23, 2023, <https://www.amestrib.com/story/news/local/2023/06/12/ames-airport-banning-black-james-herman-african-american-aviator-pioneer/70313688007/>.

The Afro-American (Baltimore)

- “Film Possibility.” May 11, 1923, 1.

Allen, Thomas C. Retired aviator. Interview by Philip S. Hart, Sept. 1982, Washington, DC.

Anderson, Ashlee. “Sally Ride (1951-2012),” National Women’s History Museum, 2018. Accessed Oct. 1, 2023, <https://www.womenshistory.org/education-resources/biographies/sally-ride>.

“Asian-Americans in Aviation.” San Diego Air and Space Museum website. Accessed Aug. 16, 2023, <https://sandiegoairandspace.org/exhibits/online-exhibit-page/asian-americans-in-aviation>.

“Asian Pacific Islander Heritage Month: Leah Hing, First Chinese-American Woman to Get a Pilot’s License.” Transportationhistory.org, May 15, 2017. Accessed Aug. 16, 2023, <https://transportationhistory.org/2017/05/15/asian-american-pacific-islander-heritage-month-leah-hing-first-chinese-american-woman-to-get-a-pilots-license/>.

“Asian American and Pacific Islander Heritage Month: Mark L. Polansky, Korean-American Astronaut.” Transportationhistory.org, May 20, 2020. Accessed Oct. 2, 2023, <https://transportationhistory.org/2020/05/29/asian-american-and-pacific-islander-heritage-month-mark-l-polansky-korean-american-astronaut/>.

Asmelash, Leah. “Bessie Coleman, pioneering pilot, now has her own Barbie,” CNN Style, Jan. 25, 2023. Accessed Sept. 30, 2023, <https://www.cnn.com/style/article/bessie-coleman-barbie-doll-cec/index.html>.

Astronaut Ellison S. Onizuka Space Center, Hawaii Aviation website. Accessed Oct. 2, 2023, <https://aviation.hawaii.gov/airfields-airports/hawaii/astronaut-ellison-s-onizuka-space-center/>.

“Aviatrix Bessie Coleman is Barbie’s New Commemorative Doll,” *Ebony* magazine, January 26, 2023. Accessed Sept. 28, 2023, <https://www.ebony.com/bessie-coleman-commemorative-barbie-doll/>.

“Barbie hails astronaut Sally Ride with new ‘Inspiring Women’ doll.” CollectSpace.com, Aug. 26, 2019. Accessed Sept. 15, 2023, <http://www.collectspace.com/news/news-082619a-astronaut-sally-ride-barbie-doll.html>.

Beeler, Ron, ed. “DC-10 Flight Memories Burn Brightly Even after Half a Century. *Roundup: DAC-MDC-Boeing Retirees of California*, No. 197 (Sept. 2020). Accessed Sept. 25, 2023, <http://www.macdacwestretirees.org/common/documents/newsletter/September%20%20Round%20Up%202020%20Final.pdf>.

Benes, Jan. “Black Empire of the Air: Black Aviation in the Harlem Renaissance and George S. Schuyler Serialized Fiction.” PhD diss, Masaryk University, 2018.

Berliner, Don. “The Big Race of 1910: How the first U.S. air race launched an aviation tradition.” *Smithsonian Air & Space Magazine*, January 2010. Accessed July 18, 2023, <https://www.smithsonianmag.com/air-space-magazine/the-big-race-of-1910-9075126/>.

“Bessie Coleman Quarter.” U.S. Mint website. Accessed Sept. 28, 2023. <https://www.usmint.gov/coins/coin-medal-programs/american-women-quarters/bessie-coleman>.

Black Aviator: The Story of William J. Powell with an introduction by Von Hardesty. Washington DC: Smithsonian Press, 1999.

Black Wings. Produced by Dan Wolf and Philip S. Hart. Washington, DC: Smithsonian Channel, 2012.

“Black Wings” video. Written by Dan Wolf and produced by Dan Wolf and Philip S. Hart. Washington DC: Smithsonian Networks, 2012.

“Blanche Stuart Scott: The First Female American Aviator.” Aerospace Pioneers, Federal Aviation Administration website. Accessed Aug. 15, 2023, <https://www.faa.gov/about/history/pioneers>.

Blanche Stuart Scott Images. San Diego Air and Space Museum website. Accessed Aug. 15, 2023, <https://sandiegoairandspace.org/collection/item/blanche-stuart-scott-images>.

Bonner, Michael. “The Brown Condor of Ethiopia: The Determination of John C. Robinson, Hero of Gulfport.” Mississippi Aviation Heritage Museum website, Feb. 28, 2021. Accessed Sept. 2,

2023, <https://msaviationmuseum.org/blog/the-brown-condor-of-ethiopia-the-determination-of-john-c-robinson-hero-of-gulfport>.

Brewer, Delaney. "Margaret Gee, women Airforce Service Pilot, August 5, 1923 – February 1, 2013." National Museum of the United States Army. Accessed Aug. 16, 2023, <https://www.thenmusa.org/biographies/margaret-gee/>.

A Brief History of the Boeing Company. Bellevue, WA: Boeing Historical Services, 2002.

Briggs, Carole S. *Women in Aviation: At the Controls*. Minneapolis, MN: Lerner Publications Company, 1991.

Brooks-Pazmany, Kathleen L. *United States Women in Aviation, 1919-1929*. Washington, DC: Smithsonian Institution Press, 1983.

Brown, Kimberly. "Maggie Gee, Pioneering Aviator." Cal@170 by California State Library. Accessed Aug. 16, 2023, <https://cal170.library.ca.gov/maggie-gee-pioneering-aviator-2/>.

Bryer, H.T. *Hidden Genius: Frank Mann, the Black Engineer Behind Howard Hughes*. Oak Harbor, OH: Grey Forest Press, LLC, 2011.

Burnett, Claudine. *African Americans in Long Beach and Southern California: A History*. Bloomington, IN: AuthorHouse, 2021.

_____. *Soaring Skyward: A History of Aviation in and around Long Beach, California*. Bloomington, IN: AuthorHouse, 2011.

California Eagle

- "Bessie Coleman Famous Aviatrix will be Seen in Person and in movies in Y.M.C.A. Benefit. May 5, 1923, 5.
- "Bessie Coleman, Girl Flyer, Meets with Serious Accident." Feb. 10, 1923, 2.
- C.A.B. (Charlotta A. Bass). "First To Try To Cross Continent Flight Drowns." Aug. 9, 1929, 1.
- "Douglas Aircraft Has Negro Expert." May 30, 1940, 1.
- "Girl Flyer Heads L.A. Aero Club." Oct. 26, 1928, 8.
- Mitchell, Dora L. "Flies All Over Europe...Fall Laid to Defective Plane." Feb. 10, 1923, 1.
- "Other Race Appreciates Girl Flyer." March 4, 1923, 1.
- "'Tell them I'm Going to Fly,' Bessie Coleman's Message to the General Public." Feb. 10, 1923, 13.

Calta, Alex. "The Long Career of Perry Young." National Air and Space Museum, Feb.5, 2017. Accessed. Oct. 1, 2023, <https://airandspace.si.edu/stories/editorial/long-career-perry-young>.

“Celebrating Iris Cummings Critchell’s 100th Birthday.” *Congressional Record* – Extensions of Remarks, Hon. Judy Chu of California in the House of Representatives, Vol. 166, No. 214 (Thurs., Dec. 17, 2020), E117. Accessed Sept. 20, 2023, <https://www.congress.gov/116/crec/2020/12/17/CREC-2020-12-17-pt1-PgE1170-4.pdf>. “The Centennial of the First Transcontinental Flight” special issue. Presented by the First Transcontinental Flight Centennial Celebration Committee and the *Long Beach Business Journal*, December 6, 2011.

Case, Walter H. *History of Long Beach and Vicinity*. New York, NY: Arno Press, 1974.

CHL No. 718, Site of Initial United States Air Meet – Los Angeles. California Historical Landmarks website. Accessed July 18, 2023, <https://www.californiahistoricallandmarks.com/landmarks/chl-718>.

City of Ames City Council president Gloria J. Betcher, email message to co-author Philip S. Hart. Regarding “City of Ames – James Herman Banning Ames Municipal Airport Dedication Ceremony Planned for June 17,” June 6, 2023.

“City of Long Beach Historic Context Statement.” Prepared by Sapphos Environmental, Inc., July 10, 2009.

Colacion, Michael, Son of Leonard Colacion and Long Beach, CA resident. Interview by Alison Rose Jefferson, Sept. 19, 2023, via telephone in Los Angeles, CA.

Columbia Memorial Space Center, City of Downey website. Accessed Sept. 27, 2023, <https://www.columbiaspace-science.org>.

Consumer Price Index (CPI) Inflation Calculator. Accessed Sept. 19, 2023, <https://www.in2013dollars.com/us/inflation/1952?amount=375000>.

Cooper, Christine, Shannon Sedgwick and Wesley DeWitt. “The Changing Face of Aerospace in Southern California: The Future is Here.” Los Angeles Economic Development Corporation Institute for Applied Economics and San Diego Regional EDC, March 2016. Accessed Sept. 18, 2023, https://laedc.org/wp-content/uploads/2016/03/LAEDC_Aerospace_FINAL_20160331b.pdf.

“Critchell Inducted Into California Aviation Hall of Fame.” Harvey Mudd College News, April 24, 2015. Accessed Sept. 20, 2023, <https://www.hmc.edu/about/2015/04/24/critchell-inducted-into-california-aviation-hall-of-fame/>.

“Critchell, Iris Cummings.” Eagle Profile, Gathering of Eagles Foundation. Accessed Sept. 20, 2023, <https://www.museumofflying.org/california-aviation-hall-of-fame/iris-cummings-critchell/>.

Daniels, Paula. "Susan Ahn Cuddy Oral Histories." CaliforniaRevealed.org, 1996. Accessed Aug. 16, 2023, <https://californiarevealed.org/do/31cb377a-8338-46d7-9eb7-18f834c56713>.

Davis-Monthan Aviation Field Register website

- "Alva Roy Ebrite." Accessed Sept. 24, 2023, https://dmairfield.org/people/ebrite_ar/index.html.
- "John Gregory Montijo." Accessed. Sept. 11, 2023, https://dmairfield.org/people/montijo_jg/index.html;

"Dedication Ceremony: Renaming of the James Herman Banning Ames Municipal Airport." City of Ames. Accessed Aug. 24, 2023, <https://www.cityofames.org/Home/Components/Calendar/Event/10953/31#:~:text=Mayor%20John%20Haila%20and%20the,public%20is%20encouraged%20to%20attend>.

Devotion. Directed by J.D. Dillard. Culver City, CA: Sony Pictures, 2022.

Dickerson, Marie Coker. Aviator, entertainer and Los Angeles, CA resident. Interview by Philip S. Hart, Sept. 1983, Los Angeles, CA.

DelGaudio, Julian and Craig Hendricks. *A Big Change for Long Beach: World War II Transforms the City*. Long Beach, CA: Historical Society of Long Beach, 2017.

Dominguez Technology Center. Watson Land Company website. Accessed July 18, 2023, <https://www.watsonlandcompany.com/about-us/>.

Doyle, Lorraine O'Donnell. *Second to None: The Story of Lloyd & Gladys O'Donnell and the 1929 Women's Air Derby*. Rancho Santa Fe, CA: Lorraine O'Donnell Doyle, 2001.

Dwight, Edward J. "Ed." Former astronaut, sculptor and historian. Accessed Aug. 30, 2023, <https://eddwight.com/>.

"Economic Impact Study of Long Beach Airport 2019. Prepared by Unison Consulting. Accessed Sept. 24, 2023, <https://www.longbeach.gov/lgb/community-information/economic-impact-information/>.

"Ellison Onizuka." Challenger Learning Center Hawaii website. Accessed Oct. 2, 2023, <https://challengercenterhawaii.com/the-challenger/ellison-onizuka/>.

"Ellison Onizuka Biographical Data." National Aeronautics and Space Administration, Jan. 2007. Accessed Oct. 2, 2023, https://www.nasa.gov/wp-content/uploads/2016/01/onizuka_ellison.pdf.

"Ellison Onizuka: First Asian American in Space." National Aeronautics and Space Administration website. Accessed Oct. 2, 2023, <https://www.nasa.gov/image-article/ellison-onizuka-first-asian-american-space/>.

"Empowering our Communities Through Aerospace." Organization of Black Aerospace Professionals News, August 2019 Convention Issue. Accessed Aug. 30, 2023, <https://obap.org>.

Enshrinement Ceremony, Meet the Class of 2023, Cornelius Coffey. National Aviation Hall of Fame, Sept. 22, 2023. Accessed Sept. 27, 2023, <https://nationalaviation.org/programs/enshrinement/>.

Fikes, Robert. "David Ellsworth Harris (1934-)." BlackPast.org, Oct. 29, 2017. Accessed Oct. 1, 2023, <https://www.blackpast.org/african-american-history/harris-david-ellsworth-1934/>.

Flaccus, Gillian. "Chinese American WASP Losing Her Anonymity." *Los Angeles Times*, May 11, 2003. Accessed Sept. 27, 2023, <https://www.latimes.com/archives/la-xpm-2003-may-11-adna-pilot11-story.html>.

Flyers in Search of a Dream. Written and produced by Philip S. Hart and Tanya Hart. PBS, 1987/PBS Home Video, 2006.

"Francisco D. Mercado, Jr." American Air Museum in Britain. Accessed Aug. 16, 2024, <https://www.americanairmuseum.com/archive/person/francisco-d-mercado>.

"Frank Calvin Mann (1908-1992)." BlackPast.org, March 10, 2021. Accessed Aug. 23, 2023, <https://www.blackpast.org/african-american-history/people-african-american-history/frank-calvin-mann-1908-1992/#:~:text=From%201943%20to%201945%2C%20Mann,to%20carry%20troops%20to%20Europe.>

"Franklin Chang-Diaz: Astronaut and Rocket Scientist." PBS Learning Media for Teachers/PBS SoCal TV. Accessed Sept. 25, 2023, <https://ca.pbslearningmedia.org/resource/nsn09.sci.engin.systems.diaz/franklin-chang-diaz-rocket-scientist/>.

"Gallery, Roosevelt Naval Base, Long Beach, CA." Paul R. Williams, American Architect: A Man and his Work website. Accessed Sept. 28, 2023, <https://www.paulrwilliamsproject.org/index.html.1.131.html>.

Gault, Kay. "Maycie Herrington: A Woman's Place in the Spotlight." Historical Society of Long Beach. Accessed Aug. 16, 2023, <https://www.hslb.org/maycie-herrington>.

Gia, Gilbert P. "La Cresta Airfield at Bakersfield, California, 1947." Accessed Sept. 11, 2023, <https://www.scribd.com/document/50410577/La-Cresta-Airfield-at-Bakersfield-California-1947>.

Gibson, Karen Bush. *Women Aviators: 26 Stories of Pioneer Flights*. Chicago, Ill: *Chicago Review Press*, 2013.

Glass, Andrew. "Congress passed Air Commerce Act, May 20, 1926." Politico.com. May 20, 2013, Accessed Aug. 16, 2023, <https://www.politico.com/story/2013/05/this-day-in-politics-091600>.

Glenshaw, Paul. "Fabulist of the Air." *Smithsonian Magazine*, June 2019. Accessed Aug. 15, 2023, <https://www.youtube.com/watch?v=52GqNQbggzA>.

Gnerre, Sam. "Iris Cummings Critchell's remarkable life – so far." South Bay History, *South Bay Daily Breeze*, March 18, 2017. Accessed Sept. 20, 2023, <http://blogs.dailybreeze.com/history/2017/03/18/iris-cummings-critchells-remarkable-life-so-far/>.

"Global Equity, Diversity & Inclusion" webpage. The Boeing Company website. Accessed Sept. 27, 2023, <https://www.boeing.com/principles/diversity-and-inclusion/#/commitment>.

Hadley-Freyberg, Elizabeth Amelia. *Bessie Coleman: The Brownskin Lady Bird*. New York, NY: Garland Publishing Company, 1994.

Hall, Chase. *The Close of Day*. Savannah, GA: Savannah College of Art and Design, 2023.

Hardesty, Von. *Black Wings: Courageous Stories of African Americans in Aviation and Space History*. Washington, D. C., Collins/NASM, 2008.

_____ and Dominick Pisano. *Black Wings: The American Black in Aviation*. Washington, D.C.: Smithsonian Institution Press, 1983.

_____. *Great Aviators and Epic Flights*. Washington, D.C. Hugh Lauter Levin Associates, Inc.

_____. Smithsonian National Air and Space Museum curator, Washington, DC. Interview by Philip S. Hart, June 2022, via telephone, Los Angeles, CA.

"Harlem's Colonel Hubert Fauntleroy Julian, Black Eagle Of Harlem." Video, Harlem World. Accessed Sept. 18, 2023, <https://www.harlemworldmagazine.com/harlems-colonel-hubert-fauntleroy-julian-the-black-eagle-of-harlem-video/>.

Hart, Philip S. *Bessie Coleman*. Minneapolis, MN, Lerner Publications Company, 2005.

_____. *Flying Free: America's First Black Aviators*. Minneapolis, MN: Lerner Publications Company, 1992.

_____. "Photo Essay - Early African American Aviators." Oxford African American Studies Center, original publication date 2013. Accessed Aug. 21, 2023, <https://tinyurl.com/HartPhotoEssay>.

_____. *Up in the Air: The Story of Bessie Coleman*. Minneapolis, MN, Lerner Publications Company, 1996.

Haskins, Jim and Kathleen Benson. *Space Challenger: The Story of Guion Bluford*. Minneapolis, MN: Carolrhoda Books, 1984.

Hatfield, David D.. *Dominguez Air Meet*. Inglewood, CA: Northrop University Press, 1976.

"Henry Shigeji Ohye," CloverField.org. Accessed Aug. 16, 2023, https://cloverfield.org/people/ohye_he/index.php.

Henry Ohye five-page biography 1968-70. "Henry Shigeji Ohye," CloverField.org. Accessed Aug. 16, 2023, https://cloverfield.org/people/ohye_he/1968-70_HenryOhye_Biography.pdf.

Herrington, Maycie. Interview, The HistoryMakers: The Digital Repository for the Black Experience. Accessed Sept. 15, 2023, <https://www.thehistorymakers.org/biography/maycie-herrington-39>.

Higgins, Joanne. Executive producer and host of *Other Moon Shot* podcast, Laist Studios (debut early 2024). Interviewed by Alison Rose Jefferson, August 2023, Los Angeles, CA.

"Historic Context Statement: Suburbanization & Race, City of Long Beach," May 19, 2022. Prepared by Historic Resources Group. Accessed Sept. 16, 2023, <https://www.longbeach.gov/lbds/planning/preservation/historic-context-statement/>.

Historical Society of Long Beach.

"The history and unknown story of Subaru." Piece of Japan website. Accessed Aug. 21, 2023, <https://piece-of-japan.com/investing/car/subaru-corporation.html>.

"History of Dominguez Rancho." Dominguez Rancho Museum website. Accessed June 15, 2023, <https://dominguezrancho.org/domingo-rancho-history/>.

"History of Rockwell International Corporation." Referenceforbusiness.com. Accessed Sept 26, 2023, <https://www.referenceforbusiness.com/history2/71/Rockwell-International-Corporation.html>.

Holtgren Pellegrino, Ann. *Iowa Takes to the Air: Volume Two 1919-1941*. Story City, IA: Aerodrome Press, 1986.

Ingells, Douglas J. *The McDonnell Douglas Story*. Fallbrook, CA: Aero Publishers, Inc., 1979.

Ingram, E. Renee. "Dunning, Joseph Samuel," Engineer, 1929-1940: The Great Depression and the New Deal, Oxford African American Studies Center. Accessed Oct. 1, 2023, https://oxfordaasc.com/browse?t=AASC_Occupations%3A1006&t0=AASC_Eras%3A8.

Iris Cummings Critchell." Museum of Flying website. Accessed. Sept. 20, 2023, <https://www.museumofflying.org/california-aviation-hall-of-fame/iris-cummings-critchell/>.

Jefferson, Alison Rose. "Leisure's Race, Power and Place: The Recreation and Remembrance of African Americans in the California Dream." PhD diss, University of California, Santa Barbara, 2015.

"Joseph S. Dunning 1937." MIT Black History. Accessed Sept. 20, 2023, <https://www.blackhistory.mit.edu/archive/joseph-s-dunning-1937>.

Johnson, Charles Floyd. *Red Tails* producer. Interview by Philip S. Hart, January 2013 via telephone, Los Angeles, CA.

"Katherine Sui Fun Cheung: Chinese-American Aviatix." Museum of Chinese in America website. Accessed Sept. 19, 2023, <https://www.mocanyc.org/collections/stories/katherine-sui-fun-cheung-chinese-american-aviatrix/>.

Kent, Jim. "Ellsworth AFB Names Building for Lakota WWII Pilot." *Lakota Times*, Oct. 12, 2017. Accessed Aug. 16, 2023, <https://www.lakotatimes.com/articles/ellsworth-afb-names-building-for-lakota-wwii-pilot/>.

Kessler, Lauren. *The Happy Bottom Riding Club: The Life and Times of Pancho Barnes*. New York, NY: Random House, Inc., 2000.

Kleinhenz, Robert A. Kimberly Ritter-Martinez and Rafael DeAnda. "The Aerospace Industry in Southern California." Los Angeles Economic Development Corporation/The Kyser Center for Economic Research, August 12, 2012. Accessed Sept. 18, 2023, <https://www.econ-jobs.com/research/50546-The-Aerospace-Industry-in-Southern-California.pdf>.

Kuykendall, Kate. "Airport Temporarily Closes Historic Terminal for Major Renovation," Long Beach Airport, Feb. 21, 2023. Accessed Oct. 10, 2023, <https://www.longbeach.gov/lgb/news/21-23-long-beach-airport-temporarily-closes-historic-terminal-for-major-renovations/>.

Lange, Katie. "Navy Lt. Susan Ahn Cuddy Carved the Path for Asian American Women." Department of Defense News, April 30, 2021. Accessed Aug. 16, 2023, <https://www.defense.gov/News/Feature-Stories/Story/article/2586537/navy-lt-susan-ahn-cuddy-carved-the-path-for-asian-american-women/>.

Laughead, Amanda. "Fighting for the Right to Fly: Marlon D. Green." National Air and Space Museum, Feb. 22, 2023. Accessed Oct. 1, 2023, <https://airandspace.si.edu/stories/editorial/marlon-green>.

Long Beach Airport Archives.

Long Beach Annexations map. Produced by Dept. of Public Works, Los Angeles County, acc. Sept. 22, 2023, https://pw.lacounty.gov/sur/nas/SMPM_AnnexationCityPDFs/Long_Beach.pdf.

"Long Beach Aviation History." Long Beach.gov. Accessed Aug. 16, 2023, <https://www.longbeach.gov/lgb/about-us/airport-history/>.

Long Beach Press-Telegram

- "Air Ordinance Prepared by Aviators," Dec. 1, 1925, 1.
- "Aviation Meet is Started." Jan. 10, 1910, 1, 8.
- "City Solons Accept Bid on Airfield." Evening Edition, July 16, 1920, 1.
- "Local band Boosting." Jan. 13, 1910, 1.
- "\$1000 in Cash is Assured Famous Aviator." Nov. 9, 1911, 2.
- Zonkel, Phillip. "Maycie Herrington, 1918-2016: Long Beach woman who preserved Tuskegee Airman history dies at 97." May 25, 2016. Accessed Sept. 15, 2023, <https://www.presstelegram.com/2016/05/25/maycie-herrington-1918-2016-long-beach-woman-who-preserved-tuskegee-airmen-history-dies-at-97/>.

"Long Beach Municipal Airport: Clement Mosaics – Long Beach, CA." Living New Deal.org. Accessed Sept. 15, 2023, <https://livingnewdeal.org/sites/long-beach-municipal-airport-clement-mosaics-long-beach-ca/>.

Los Angeles Evening Express

- "Chinese Aviator to Fly Tomorrow." Jan. 20, 1912, 3.
- "First Chinese Airman Makes Good Flight." Jan. 19, 1912, 4.

Los Angeles Evening Herald

- "Free Air Shows" Feb. 17, 1923, 8.

Los Angeles Public Library Photograph Collection Archives.

Los Angeles Times

- "Aviation Field Sidelights." Jan. 13, 1910, P. II, 7.
- "Colacion, Leonard 'Nayo'." Obituaries, April 1, 2000, B12.
- "Colored Air Circus Thrills Thousands." Dec. 7, 1931, 26.
- "Dividends For Public Spirit. First Aviation Meet Repays Backers Handsomely." Mar. 12, 1912, P. II, 1.
- "Money Back With Bonus." Jan. 20, 1910, P. II, 1.
- "More stunts and less aneroid. Aviation show to be three-ring air circus." Jan. 3, 1912, P. III, 1-2.
- Rasmussen, Cecilia. "Early Black Pilot Found Racial Equality in the Sky." Nov. 5, 2000. Accessed Sept. 20, 2023, <https://www.latimes.com/archives/la-xpm-2000-nov-05-me-47380-story.html>.
- "Services Set for Joseph Dunning; Retired Aerospace Executive." Feb. 3, 1991. Accessed Sept. 28, 2023, <https://www.latimes.com/archives/la-xpm-1991-02-03-mn-773-story.html>.
- "Woman Pilots Lead Here, More Than One-fourth of Feminine Holders of Licenses to Fly Live in California,." May 11, 1930, P. VI, 9.
- "World's Progress Shown in a New Light by Week's Triumphs at Aviation Meet." Jan. 16, 1910, P. II, 1.
- Wynne, R.A. "Exciting Duel High Among Fleecy Clouds." Jan. 22, 1912, P. III, 1.

"Mark Polansky Biographical Data." National Aeronautics and Space Administration, July 2012. Accessed Oct. 2, 2023, https://www.nasa.gov/wp-content/uploads/2016/01/polansky_mark.pdf.

Maksel, Rebecca. "The Unrecognized first African-American pilot, wasn't known to historians until recently." *Smithsonian Air & Space Magazine*, March 2011,. Accessed Aug. 21, 2023, <https://www.smithsonianmag.com/air-space-magazine/the-unrecognized-first-79496373/>.

Marchetti, Shalyn. "Neta Snook: Amelia Earhart's Instructor and One of the First Female Test Pilots." *Plane & Pilot Magazine*, Updated October 19, 2022. Accessed Aug. 23, 2023, <https://www.planeandpilotmag.com/news/pilot-talk/neta-snook-amelia-earharts-instructor-and-one-of-the-first-female-test-pilots/>.

Martinez, Ehud. "Anthony Acevedo," Voices Oral History Center, The University of Texas at Austin, May 10, 2009. Accessed Aug. 16, 2023, <https://voces.lib.utexas.edu/collections/stories/anthony-acevedo>.

Masters, Nathan. "Before Santa Monica Airport, There Was Clover Field." KCET.org, March 27, 2018. Accessed Sept. 11, 2023, <https://www.kcet.org/shows/lost-la/before-santa-monica-airport-there-was-clover-field>.

Masters, Nathan. "From Mines Field to LAX: The Early History of LA International Airport,." KCET, July 25, 2012. Accessed Aug. 16, 2023, <https://www.kcet.org/shows/lost-la/from-mines-field-to-lax-the-early-history-of-l-a-international-airport>.

"Mayor Welcomes Aviators." Los Angeles Almanac, Dec. 6, 1931. Accessed Sept. 20, 2023, <http://www.laalmanac.com/history/hi741.php>.

McGinnis, Patricia (Douglas archivist, The Boeing Company). In discussion about Black, Latinx, Asian, Indigenous, and other persons of color employees historical data via emails and virtual meeting with authors Alison Rose Jefferson and Philip S. Hart, and Long Beach Airport public affairs officer Kate Kuykendall, April–May 2023.

Meares, Hadley. "How the aviation industry shaped Los Angeles." *la.curbed.com*, July 8, 2019. Accessed. July 19, 2023, <https://la.curbed.com/2019/7/8/20684245/aerospace-southern-california-history-documentary-blue-sky>.

Meares, Hadley. "The Colored Air Circus in 'Perry Mason 'Was Real – And Revolutionary.'" *Laist.com*, Aug. 12, 2020., Accessed Aug. 14, 2023, <https://tinyurl.com/Laist-Meares>.

"Meet Joseph S. Dunning." *The Crisis*, Vol. 47, Iss. 7, July 7, 1940. Accessed Sept. 20, 2023, https://archive.org/details/sim_crisis_1940-07_47_7/mode/2up?view=theater&ui=embed&wrapper=false.

Million Miles Away directed by Aljandra Marquez Abella, Amazon Studios. Accessed. Sept. 25, 2023, <https://press.amazonstudios.com/us/en/original-movies/a-million-miles-away>.

Milloy, Courtland. "'Red Tails' a disservice to Tuskegee Airmen." *The Washington Post*, Jan. 29, 2012. Accessed Sept. 20, 2023, https://www.washingtonpost.com/local/red-tails-a-disservice-to-tuskegee-airmen/2012/01/29/gIQAekHwaQ_story.html.

Moller, Rosa Maria. "Aerospace states' incentives to attract the industry: an update." Sacramento, CA: California State Library, California Research Bureau, 2008. Accessed June 1, 2023, <https://www.library.ca.gov/wp-content/uploads/crb-reports/08-005.pdf>.

Monteagudo, Merrie. "From the Archives: 'Skippy' Smith made history in 1942." *San Diego Union-Tribune*, March 29, 2022. Accessed Aug. 24, 2023, <https://www.sandiegouniontribune.com/news/local-history/story/2022-03-29/from-the-archives-skippy-smith-made-history-in-1942>.

Morgan, Allen E. "A History of NRAB Long Beach." *Foundation*, Vol. 27, No. 1 (Spr. 2006): 93-193.

Morgan, Allen E. "Post Script NRAB Long Beach." *American Aviation Historical Society Journal*, Vol. 17, No. 3 (Fall 1972): 191-193.

Mosley, Walter. *Devil in a Blue Dress*. New York, NY: Simon & Schuster, 1990.

"NASA's Hispanic Astronauts." National Aeronautics and Space Administration website. Accessed Sept. 27, 2023, https://www.nasa.gov/sites/default/files/atoms/files/hispanic_astronauts_fs.pdf;

Nash, Sunny, ed. *Untold Legacies: A Pictorial History, Black Long Beach 1900-200 & Beyond* with forward by Marie Treacwell. Long Beach, CA: National Council of Negro Women, Inc., 2007.

"National Hispanic Heritage Month: Francisco D. Mercado, Jr., U.S. Army Air Forces Pilot." TransportationHistory.org. Accessed Aug. 16, 2023, <https://transportationhistory.org/2021/09/29/national-hispanic-heritage-month-francisco-mercado-jr-u-s-army-air-forces-pilot/#more-5903>.

Neal, J. Wesley. "America's First International Air Meet." *The Historical Society of Southern California Quarterly*, Vol. 43, No. 4 (Dec., 1961): 369-414.

New York Times

- Broad, William J. "Private Company Lofts A Satellite Into Earth Orbit," Aug. 28, 1989, A1.
- Salpukas, Agis. "James Plinton Jr., 81; broke Color Barriers at U.S. Airlines." July 14, 1996. Accessed Oct. 1, 2023, <https://www.nytimes.com/1996/07/14/us/james-plinton-jr-81-broke-color-barriers-at-us-airlines.html>.
- Sandomir, Richard. "Anthony Acevedo, Who Documented His Holocaust Ordeal, Dies at 93," March 16, 2018. Accessed Aug. 16, 2023, <https://www.nytimes.com/2018/03/16/obituaries/anthony-acevedo-who-documented-his-holocaust-ordeal-dies-at-93.html>
- Schuessler, Jennifer. "At the Roosevelt Library, an Unflinching Look at Race." Aug. 1, 2023. Accessed Aug. 30, 2023, <https://www.nytimes.com/2023/08/01/arts/fdr-library.html>.
- Williams, Lena. "Cover Story: Flying in the Face of Discrimination." Aug. 20, 1995. Accessed Sept. 20, 2023, <https://www.nytimes.com/1995/08/20/tv/cover-story-flying-in-the-face-of-discrimination.html>.

"One of WWII's original Tuskegee Airmen dies at 99." CNN Wire, FOX 5 TV, June 23, 2019. Accessed Aug. 16, 2023, <https://fox5sandiego.com/news/trending/one-of-wwiis-original-tuskegee-airmen-dies-at-99/>.

Peck, Merton J. and Frederick M. Scherer. *The Weapons Acquisition Process: An Economic Analysis*. Boston, MA: Division of Research, Harvard Business School, 1962,

Pham, Quang X. *A Sense of Duty: Our Journey from Vietnam to America*. New York: Presidio Press/The Random House, Inc., 2005/2010.

“Pioneers of the Skies: Featuring Hazel Ying Lee (1912-1944).” Cockpit USA website. Accessed Sept. 27, 2023, <https://cockpitusa.com/blogs/blog/pioneers-of-the-skies-featuring-hazel-ying-lee-1912-1944-on-international-women-s-month>.

Pittsburgh Courier

- “Ace Foreman Lived an Eventful Life: Death was Sad, Tragic End” Aug. 17, 1929, 2.

Pancho Barnes Trust Estate Archives.

The Pomona Progress

- “Chinese To Fly At Dominguez.” Jan. 26, 1912, 1.

Port of Long Beach History. Port of Long Beach website. Accessed May 22, 2023, <https://polb.com/port-info/history/#historical-publications>.

Powell, William J. *Black Wings*. Los Angeles, CA: Ivan Deach, Jr., 1934.

Pierce, Eric. “Downey celebrates relocation of space shuttle mock-up.” *The Downey Patriot*, July 19, 2012. Accessed Sept. 27, 2023, <https://www.thedowneypatriot.com/articles/downey-celebrates-relocation-of-space-shuttle-mock-up>.

Rawls, James J. and Walton Bean. *California: An Interpretive History* 8th ed. New York, NY: McGraw-Hill, 2003.

Rich, Doris L. *Queen Bess: Daredevil Aviator*. Washington, D.C, Smithsonian Institution Press, 1993.

Richardson, Brandon. “Preserving the past: Work begins on Long Beach Airport’s historic terminal building.” *Long Beach Business Journal*. Accessed. Sept. 15, 2023, <https://lbbusinessjournal.com/news/preserving-the-past-work-begins-on-long-beach-airports-historic-terminal-building/>.

Richardson, Gary. “*The Federal Reserve’s Role During World War II, 1941-1945.*” Federal Reserve Bank of Richmond, Federal Reserve History, November 22, 2013. Accessed Aug. 16, 2023, <https://www.federalreservehistory.org/essays/feds-role-during-wwii>.

Rosie The Riveter Park, Long Beach Parks, Recreation and Marina Department website. Accessed Sept. 20, 2023, <https://www.longbeach.gov/park/park-and-facilities/directory/rosie-the-riveter-park/>.

The San Francisco Examiner

- “Miss Blanche Scott and Tom Gunn, Chinese Aviator, Win Applause; Flyers Startle Throngs in Field by Reckless Dips Close to their Head.” Feb. 19, 1912, 1.

Schipske, Gerrie. *Early Aviation in Long Beach*, Images of American Series. Charleston, SC: Arcadia Publishing, 2009.

_____. Rosie the Riveter in Long Beach. *Early Aviation in Long Beach*, Images of American Series. Charleston, SC: Arcadia Publishing, 2008.

Schoneberger, William A. *California Wings: A History of Aviation in the Golden State*. Woodland Hills, CA: Windsor Publications, Inc., 1984.

Scott, Jim. “Three is the magic number: How are airport codes chosen?” *Airport World* magazine. Accessed Oct. 25, 2023, <https://airport-world.com/three-is-the-magic-number-how-are-airport-codes-chosen/>.

Shaftel, David. “The Black Eagle of Harlem.” *Smithsonian Air & Space Magazine*, Dec. 2008. Accessed Sept. 18, 2023, <https://www.smithsonianmag.com/air-space-magazine/the-black-eagle-of-harlem-95208344/>.

Sigler, Lora Ann. *Wartime Style – Fashion and American Culture During 20th Century Conflicts*. Jefferson, NC: McFarland and Co., 2022.

Starr, Kevin. *Embattled Dreams: California in War and Peace, 1940-1950*. New York, NY: Oxford University Press, 2003.

Starr, Kevin. *Material Dreams: Southern California Through the 1920s*. New York, NY: Oxford University Press, 1991.

Steck, Em. “Women Airforce Service Pilots Aided American War Efforts With Help From These Women of Color.” *Teen Vogue*, December 24, 2017. Accessed Aug. 16, 2023, <https://www.teenvogue.com/story/women-airforce-service-pilots-aided-american-war-efforts-with-help-from-these-women-of-color>.

“Subaru history, profile and history video.” CompaniesHistory.com. Accessed Aug. 21, 2023, <https://www.companieshistory.com/subaru/>.

“Sui Fun Cheung: The First Asian American Aviator,” Federal Aviation Administration, Aug. 23, 2022, acc. Sept. 19, 2023, <https://www.faa.gov/history/pioneers/katherine-sui-fun-cheung-first-asian-american-female-aviator>.

Tabor, Jr., John Q. Las Vegas, NV resident. Interview by Allyson Tabor, April 25, 2011, Las Vegas, Nevada (copy in possession of co-author Alison Rose Jefferson).

“Taylor Wang, facts for kids.” Kids Encyclopedia Facts. Accessed Sept. 29, 2023, https://kids.kiddle.co/Taylor_Wang.

“Taylor Wang,” Honorary Board of Directors, Chinese American Museum website. Accessed Sept. 29, 2023, <https://www.chineseamericanmuseum.org/new-page-4>.

Taylor G. Wang Biographical Data. National Aeronautics and Space Administration, May 1985. Accessed Sept. 29, 2023, <https://www.nasa.gov/wp-content/uploads/2016/01/wang-t.pdf>.

“Teaching the World to Fly.” GlennH.CurtissMuseum.org. Accessed Aug. 21, 2023, <https://glennhcurtissmuseum.org/education/teaching-the-world-to-fly/>.

“Teal Ruby.” National Museum of the United States Air Force. Accessed Sept. 26, 2023, <https://www.nationalmuseum.af.mil/Visit/Museum-Exhibits/Fact-Sheets/Display/Article/589823/teal-ruby/>.

“Tom Gunn, Chinese American Aviator” video. Young Historians, Living Histories, Smithsonian Asian Pacific American Center. Accessed Aug. 15, 2023, <https://www.youtube.com/watch?v=52GqNQbggZA>.

United States Census.

United States Senate Resolution 73, International Black Aviation Professionals Day, Feb. 16, 2023. Accessed Sept. 20, 2023, <https://www.congress.gov/bill/118th-congress/senate-resolution/73?s=1&r=99>.

“Vin Fiz Flies in the Museum’s Rotunda.” San Diego Air & Space Museum website. Accessed Sept. 11, 2023, <https://sandiegoairandspace.org/newsletters/article/vin-fiz-flies-in-the-museums-rotunda>.

“Walter Mosley On The Stories Of LA Told Through Easy Rawlins.” Morning Addition, NPR, July 28, 2016. Accessed, Oct. 8, 2023, <https://www.npr.org/2016/07/28/487729929/walter-mosley-on-the-stories-of-la-told-through-easy-rawlins>.

Westwick, Peter J. ed. *Blue Sky Metropolis: The Aerospace Century in Southern California*. Berkeley and San Marino, CA: Huntington-USC Institute on California and the West by University of California Press and The Huntington Library, 2012.

Wings Over Long Beach Aviation Expo event (Nov. 2–3, 1996) publication. Prepared by the *Long Beach Business Journal*, November 1996.

“Women Airforce Service Pilot Hazel Ying Lee.” The National WWII Museum. Accessed Aug. 16, 2023, <https://www.nationalww2museum.org/war/articles/women-airforce-service-pilot-hazel-ying-lee>.

“Women in Transportation History: Neta Snook Southern, Pilot” TransportationHistory.org. Accessed Aug. 23, 2023, <https://transportationhistory.org/2019/03/18/women-in-transportation-history-neta-snook-southern-pilot/>.

Wortman, Marc .“The First Black Airmen to fly Across America.” *Smithsonian Air and Space Magazine*, January/February 2018. Accessed Aug. 16, 2023, <https://www.smithsonianmag.com/air-space-magazine/banning-allen-transcontinental-flt-180967706/>.

_____. *The Millionaires’ Unit: The Aristocratic Flyboys who Fought the Great War and Invented American Airpower*. New York, NY: Public Affairs, 2006.

Yenne, Bill. *The Story of the Boeing Company, Revised & Updated Edition*. St. Paul, MN: Zenith Press, 2005.



long beach
airport

4100 Donald Douglas Drive
Long Beach, CA 90808

www.lgb.org



CITY OF
LONG BEACH

411 West Ocean Boulevard
Long Beach, CA 90802

www.longbeach.gov



**Historical Society
of Long Beach**

4260 Atlantic Avenue
Long Beach, CA 90807

www.hslb.org

